

GRAIN & FEED JOURNALS

CONSOLIDATED

ol. LXXXIII. No. 2

Chicago, Ill., U. S. A., July 26, 1939

Price \$2.00 Per Year. 25 Cents Per Copy

A Merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter

Come to "HEADQUARTERS" FOR MOISTURE TESTERS

It will pay you to come to "Headquarters for moisture testers" . . . no matter what your problem in moisture analysis may be.

Here at Seedburo you may select Steinlites . . . Tag-Heppenstalls . . . Official Brown-Duvels and other testers, and you may have the suggestions of our testing experts who have been serving the grain and seed trades since 1912.

NEW ACCURACY WITH THE STEINLITE

The Steinlite . . . the newest development in electric moisture testers . . . insures a higher degree of accuracy. The variation in readings made by different operators is reduced to a minimum. That's because making the test and reading the results are as simple as operating a radio. The Steinlite was developed by renowned scientists to operate on the electric impedance principle. Compact, easily portable, fully guaranteed.

THE TAG-HEPPENSTALL MOISTURE METER

One of the first rapid electrical instruments for determining the moisture content of grain offered to the grain and milling industries. Ready for use at any time. No weighing to make. Celebrated with the assistance of the U. S. Department of Agriculture.

THE OFFICIAL BROWN-DUVEL

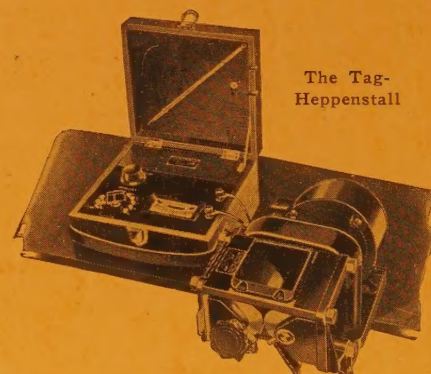
Manufactured strictly in accordance with government specifications as contained in U. S. D. A. Bulletin No. 1375 under the personal supervision of Mr. L. M. Smith, formerly with the Grain Standardization Division of the U. S. Department of Agriculture.

SEND FOR NEW FREE CATALOG

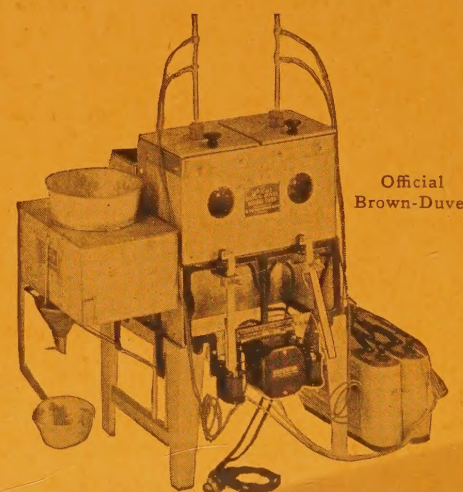
Send for a free copy of our latest enlarged catalog describing all types of moisture testers, scales, weight per bushel testers, sieves, triers, samplers, germinators and other grain and seed testing equipment. It contains a large section devoted to official testing data.



The Steinlite



The Tag-Heppenstall



Official Brown-Duvel

SEED TRADE REPORTING BUREAU, Inc.

620 BROOKS BUILDING
CHICAGO, ILLINOIS



Largest distributors of Grain, Flour and Seed
Testing Equipment in the World. Founded 1912

Directory of the Grain Trade

In Organized Markets Only Members of the Local Grain Exchange Will Be Listed

HAVING YOUR name in this directory will introduce you to many old and new firms during the year, whom you do not know or could not meet in any other way. Many new concerns are looking for connections, seeking an outlet or an inlet, possibly in your territory. It is certain that they turn to this recognized Directory, and act upon the suggestions it gives them. The cost is only \$10 per year.

AMARILLO, TEXAS

Grain Exchange Members

Barrus Panhandle Elevators, public storage-ndsing.*
Great West Mill & Elevator Co., millers, grain dealers.*
Hardeman-King Co., grain seeds, feed mfrs.*
Henneman Grain & Seed Co., seeds and grain.*
Kearns Grain & Seed Co., grain-field seeds.*
Martin-Lane Grain Co., grain and public storage
Producers Grain Corp., federal bonded warehouse
Stone, Lester, grain merchant.

BALTIMORE, MD.

Chamber of Commerce Members

Beer & Co., Inc., E. H., grain, hay, seeds.*

BUFFALO, N. Y.

Corn Exchange Members

American Elvtr. & Grain Div., recrs., shprs., consmts.*
Cargill, Incorporated, grain merchants.*
Eastern Grain Elvtr. Corp., Recvrs., shprs., elvtr. ops.*
Lewis Grain Corporation, consignments.*
McKillen, Inc., J. G., consignments.*
Provost, S. E., grain and feed broker.*
Wood Grain Corp., consignments, brokerage.*

CAIRO, ILL.

Hastings Co., Samuel, receivers and shippers.*

CEDAR RAPIDS, IOWA

Federal-North Iowa Grain Co., country run grain.*
Whider Grain Co., grain merchants.*

CHAMPAIGN, ILL.

Sawyer & Rising, grain brokers, all markets

CHICAGO, ILL.

Board of Trade Members

Bailey & Co., E. W., grain commission merchants.*
Bennett & Co., Jas. E., grain, provisions, stocks.*
Continental Grain Co., grain merchants.
Hoit & Co., Lowell, commission, grain and seeds.*
Lamson Bros. & Co., grain, stocks, provisions.*
Norris Grain Co., grain merchants.*
Quaker Oats Co., grain merchants.

CLEVELAND, OHIO

The Bailey Cain Co., shpr. grain, mill'd, oil, c.s. meal.*
The Cleveland Grain Co., home office.*

COLUMBUS, OHIO

Commins & McAllister, brokers grain, feed, oil.*
Dill Grain Co., L. J., mchts.-brokers, grain, beans, feeds.

CINCINNATI, OHIO

The Early & Daniel Co., grain and feed service.*

DALLAS, TEXAS

Crouch Grain Co., J. C., buyers wheat, corn, oats.*

DECATUR, ILL.

Baldwin Elevator Co., grain merchants.*
Evans Elevator Co., grain, Chicago B. of T. Members.*

*Members Grain & Feed Dealers National Assn.

DENVER, COLO.

Grain Exchange Members

The Ady & Crowe Merc. Co., whole, grain beans, feeds.
The Houlton Grain Co., grain merchants.*
Intermountain Elevator Co., recvrs., shprs., consignmts.*
Fred M. Smith—Grain, consignments.
The Trinidad Bean & Elev. Co., grain, beans, peas.*

DODGE CITY, KANS.

Dodge City Term. Elvtr. Co., bonded storage-mchdrs.*

ENID, OKLA.

Board of Trade Members

Enid Elevator Corp., operating Enid Terminal Elevator*
Johnston Grain Co., W. B., wheat, coarse gr., fld. seeds.*
Fenquay Grain Co., opns., country elvtrs., gr. mdsg.*
General Grain Co., term. elvtr., gr. merchants.
E. R. Humphrey Grain Co., grain merchants.*
Salina Terminal Elvtr., -opns. Southwest Term. Elvtr.

FORT WORTH, TEXAS

Grain and Cotton Exchange Members

Brackett Grain Co., brokerage, consignments.*
Carter Grain Co., C. M., brokerage and consignments.*
The Ft. Worth Elva. & Whsg. Co., public storage.*
Lone Star Elevators, public storage-merchandising.
Rogers Co., E. M., brokerage and consignments.*
Transit-Gr. & Comm. Co., mchts., storage, consnts.*

HUTCHINSON, KAN.

Farmers Co-Operative Comm. Co., grain storage.
Smoot Grain Co., oper. Grain Belt Elevator.*

INDIANAPOLIS, IND.

Board of Trade Members

Cleveland Grain Co., grain commission.*

KANSAS CITY, MO.

Board of Trade Members

Davis-Hunt Grain Co., consignments and futures.
Davis-Noland-Merrill Grain Co., grain mchts.*
The Kansas Elevator Co., mlg. wheat, corn, oats, barley.*
Meservy-O'Sullivan Grain Co., gr. mchts., consgmts.*
Mid-Continent Grain Co., gen'l grain merchants.
Moore-Seaver Grain Co., grain receivers.*
Rahm Grain Co., J. E., cash commission merchants.*
Secular Bishop Grain Co., consignments.*
Simonds-Shields-Thels Grain Co., grain merchants.*
Vanderslice-Lynsds Co., kafir and milo merchants.*
Wolcott & Lincoln, Inc., consignments.*

LOUISVILLE, KY.

Board of Trade Members

Zorn & Co., S., receivers and shippers.*

MEMPHIS, TENN.

Merchants Exchange Members

Buxton, E. E., broker and commission merchant.*

MILWAUKEE, WIS.

Grain & Stock Exchange Members

Stratton Grain Co., grain merchants.*

MINNEAPOLIS, MINN.

Chamber of Commerce Members

Bunge Elevator Corp., grain merchants.*
Cargill, Incorporated, milling wheat.*
Scroggins Grain Co., grain merchants.*

OMAHA, NEBR.

Grain Exchange Members

Bell-Trimble Co., recvrs. and shippers.*
Urdike Grain Corp., receivers & shippers.*

PEORIA, ILL.

Board of Trade Members

Bowen Grain Co., H. D., grain commission.*
Cole Grain Co., Geo. W., receivers and shippers.
Dewey & Sons, W. W., grain commission.*
Feltman Grain Co., C. H., grain commission.
Luke Grain Co., grain commission.*
Miles, P. B. & C. C., grain commission.*

PITTSBURGH, PA.

Member Grain and Hay Exchange

Rogers & Co., Geo. R., receivers, shippers.*

PONTIAC, ILL.

Balbach, Paul A., grain buyers, all markets.

ST. JOSEPH, MO.

Grain Exchange Members

Dannen Grain & Mlg. Co., grain mchts.-consignments.*
Stratton Grain Co., grain merchants.*
C. L. Weekes Grain Co., consignments, order buying.

ST. LOUIS, MO.

Merchants Exchange Members

Anheuser-Busch, Inc., feed grains.*
Fuller-Woolbridge Com. Co., gr. & millets, all kinds.*
Langenberg Brok. Grain Co., grain commission.*
Morton & Co., grain commission.*
Mullally-Evans Co., everything in grain.*
Nanson Commission Co., grain commission.*
Teasdale Comm. Co., J. H., consignments solicited.*
Terminal Grain Co., grain, soybeans, consignments.*

SALINA, KANS.

Eberhardt-Simpson Grain Co., general mchts.*
Smoot Grain Co., oper. Salina Terminal Elevator.*

SIDNEY, OHIO

E. T. Custerbender & Co., carlot grain.
Wells Co., The J. E., wholesale grain.*

SIOUX CITY, IOWA

Grain Exchange Members

Flanley Grain Co., grain merchants.*

TOLEDO, OHIO

Board of Trade Members

De Vore & Co., H. W., consignments, futures, tr. buyers.
Rice Grain Co., "Oats Specialists."*
Southworth Grain Co., consignments, futures.

TOPEKA, KANSAS

Derby Grain Co., general grain merchants.*
Erni Lieber, grain broker.

WELLINGTON, KANS.

Wolcott & Lincoln, Inc., opers. Wellington Term. Elvtr.

WICHITA, KANS.

Board of Trade Members

Craig Grain Co., wheat, feed & consgmts., bonded whses.
Wichita Terminal Elvtr. Co., gen'l elvtr. business.*

WINCHESTER, IND.

Goodrich Bros. Co., wholesale grain and seeds.*

Grain & Feed Journals Consolidated, a merger of Grain Dealers Journal (Est. 1898), American Elevator & Grain Trade (Est. 1882), Grain World (Est. 1928), and Price-Current-Grain Reporter (Est. 1884). Published on the 2nd and 4th Wednesday of each month in the interest of progressive wholesalers in grain, feed, and field seed. 332 South La Salle Street, Chicago, Illinois, U. S. A. Price \$2.00 per year, 25c per copy. Entered as second class matter November 27, 1930, at the Post Office at Chicago, Ill., under the act of March 3, 1879. Vol. LXXXIII. No. 2. July 26, 1939.

Use Universal Grain Code and Reduce Your Telegraph Tolls

Chamber of Commerce
Members**MINNEAPOLIS**Chamber of Commerce
Members**Clark's Car Load
Grain Tables**

Eighth edition, extended to show bushels in largest carloads, shows the following range of reductions of pounds to bushels by fifty pound breaks.

20,000 to 129,950 lbs. to bushels of 32 lbs.	
20,000 " 74,950 " " " " 34 "	
20,000 " 118,950 " " " " 48 "	
20,000 " 140,950 " " " " 56 "	
20,000 " 140,950 " " " " 60 "	

Pounds in red ink; bushels in black, 48 pages. Linen ledger paper reinforced, bound in keratol with marginal index. Weight, 8 oz.

Price \$2.50 at Chicago

GRAIN & FEED JOURNALS
Consolidated

332 So. La Salle St., Chicago

If What You Want you see
advertised, tell the advertiser.
If Not—Tell the Journal.

COAST TO COAST GRAIN SERVICE

CARGILL

INCORPORATED

MINNEAPOLIS, MINN.

761 Chamber of Commerce

Terminal Offices

Country Offices
Fairmont, Minn.
Marshall, Minn.
Sioux Falls, So. Dak.
Lincoln, Neb.

Duluth, Milwaukee, Chicago, Green Bay, Cedar Rapids,
Toledo, Buffalo, Albany, New York, Omaha, Kansas
City, St. Louis, Portland, Seattle, Winnipeg, Man.;
Montreal, Que.

Cargill, Incorporated, Seed Division, Box 64, Minneapolis

WHEAT

AND ALL OTHER GRAINS

Any Grade—Any Quantity—Any Time

BUNGE ELEVATOR CORPORATION
MINNEAPOLIS, MINN.

Board of Trade
Members**KANSAS CITY**Board of Trade
Members**SIMONDS-SHIELDS-THEIS GRAIN CO.****GRAIN MERCHANTS**

ELEVATOR CAPACITY, 4,000,000 BUSHELS

Frank A. Theis, President

F. J. FitzPatrick, Vice President

F. L. Rosenbury, Secy-Treas.

**Davis
Grain Tables**

show at a glance, or with one addition, the value of any number of bushels and odd pounds of wheat, ear and shelled corn, oats, and barley, at any price from 12c to \$1.75 per bushel, by $\frac{1}{2}$ c rises. Well printed on book paper and bound, 256 pages, size $5\frac{1}{2} \times 7\frac{3}{4}$ inches. Price, \$2.00, f. o. b. Chicago. Weight, 14 ounces.

GRAIN & FEED JOURNALS
Consolidated

332 S. La Salle St., Chicago, Ill.

We have found your Journal very instructive and should the writer ever re-enter the grain business his name will again be found on your subscription list.—Jas. H. Myers (of the former Myers & Hardy), Reedson (Shenandoah Junction p. o.), Ia.

WOLCOTT & LINCOLN

Incorporated

801-810 Bd. of Trade, Kansas City
CONSIGNMENTS

Future orders executed in all markets.

Alton Elevator, Kansas City
Wellington Terminal Elev., Wellington, Kans.
Hutchinson, Kans. Salina, Kans.
Wichita, Kans. Dodge City, Kans.
Marysville, Kans. Wellington, Kans.
Hoisington, Kans. Enid, Okla.



Everytime you mention the semi-monthly Grain & Feed Journals to an advertiser, you encourage him to make good on his advertised claims.

Board of Trade
Members**CHICAGO**Board of Trade
Members**LAMSON BROS. & CO.**

2200 Board of Trade

Established 1874

Chicago, Ill.

*"65 years of continuous service in the grain trade."*GRAIN — BEANS
STOCKS — BONDS
COTTON — BUTTER
EGGS — PROVISIONS**E. W. BAILEY & CO.**

COMMISSION MERCHANTS

GRAIN, SEEDS AND PROVISIONS

1142-44 Board of Trade, CHICAGO

JAMES E. BENNETT & CO.

ESTABLISHED 1880

332 So. La Salle St., CHICAGO, ILL.

CONSIGNMENTS AND FUTURES ORDERS SOLICITED IN ALL PRINCIPAL MARKETS

KANSAS CITY
Board of TradeST. LOUIS
Merchants ExchangePEORIA
Board of TradeCAIRO
Board of TradeINDIANAPOLIS
Board of TradeMINNEAPOLIS
Chamber of Commerce**ASK FOR BIDS**
Wheat — Corn — Barley
Rye — Oats — Soy Beans**CONTINENTAL GRAIN COMPANY**332 SOUTH LA SALLE STREET, CHICAGO
PRODUCE EXCHANGE, NEW YORK**RECEIVERS — SHIPPERS — EXPORTERS**

MEMBERS OF ALL LEADING COMMODITY EXCHANGES

TERMINAL ELEVATORS

CHICAGO • ST. LOUIS • PEORIA • KANSAS CITY • OMAHA

THE QUAKER OATS COMPANY

BUYERS OF

Oats Corn Wheat BarleyCedar Rapids,
Ia.Ft. Dodge,
Ia.Akron,
OhioSt. Joseph,
Mo.

CHICAGO, ILLINOIS

**Hedging by Dealing
in Grain Futures***By G. Wright Hoffman, Ph.D.*

A subject of much interest to all handlers of grain; not a fragmentary discussion but a presentation of the subject in a comprehensive and scientific manner.

This book, bound in cloth, 141 pages, includes, besides an extensive bibliography, chapters on: The Development of Futures Trading and the Practice of Hedging; The Theory of Hedging; Limitations Affecting Hedging; The Extent of Hedging; Extension of the Principle of Hedging.

This is a valuable book and will be worth to you many times its cost.

Price \$2.00 f. o. b. Chicago

GRAIN & FEED JOURNALS

Consolidated

332 S. La Salle St.

Chicago, Ill.

To BUY or SELL**RENT or LEASE
an ELEVATOR**

Place an adv. in the "Wanted" or "For Sale" columns of the GRAIN & FEED JOURNALS, of Chicago. It will bring you quick returns.

Use Universal Grain Code**and Reduce Your Telegraph Tolls**

Corn Exchange
Members**BUFFALO**Corn Exchange
Members

Wood Grain Corp.
CONSIGNMENTS—BROKERAGE
BUFFALO, N. Y.

American Elevator & Grain Division

Russell Miller Milling Company
RECEIVERS, SHIPPERS AND ELEVATOR OPERATORS
CONSIGNMENTS SOLICITED

Our System of Terminal Elevators, enables us to give prompt service and reliable quality on coarse grains, durums and protein milling wheats.

Safety
Sample Envelopes

for mailing samples of grain, feed and seed. Made of heavy kraft paper, strong and durable; size, 4½x7 inches. Have a limited supply to sell at \$2.35 per hundred, 500, \$10.00 plus postage.

GRAIN & FEED JOURNALS
Consolidated
332 S. La Salle St., Chicago, Ill.

EASTERN GRAIN ELEVATOR CORPORATION

Receivers, Shippers, Elevator Operators
CONSIGNMENTS SOLICITED

Lewis Grain Corp.

A good firm to consign to
Corn—Oats—Soft Wheat—Barley
BUFFALO NEW YORK

J. G. McKILLEN, INC.

RECEIVERS
Consignments a Specialty
BUFFALO NEW YORK

Grain Exchange
Members**DENVER**Grain Exchange
Members**THE TRINIDAD BEAN & ELEVATOR CO.**

COOPER BLDG. DENVER, COLO



GRAIN
DRIED BEANS
WHOLE PEAS
SPLIT PEAS

Intermountain Elevator Company

and FORT MORGAN MILLS, INC. DENVER, COLORADO
Receivers, Shippers, and Elevator Operators

CONSIGNMENTS SOLICITED

Ample storage, constant stocks, and country connections enable us to give prompt, efficient service, and dependable quality on coarse grains, and protein milling wheats.

THE HOULTON GRAIN CO.

Grain Merchants
DENVER, COLORADO

FRED M. SMITH—GRAIN
Denver, Colo.

Originators and merchandisers of milling wheat and coarse grains.
200,000 bushels public storage.
Consignments Solicited.

RECEIVERS, SHIPPERS AND BROKERS**E. H. BEER & CO., INC.**

Successors to
Chas. England & Co., Inc.
GRAIN—HAY—SEEDS
Commission Merchants
308-310 Chamber of Commerce, Baltimore

LANGENBERG BROS. GRAIN COMPANY

Established 1877
ST. LOUIS NEW ORLEANS

Nanson Commission Co.

Grain—Hay—Seeds
202 Merchants Exchange Bldg.
ST. LOUIS, MO.

**CONFIRMATION
BLANKS****Simple - Complete - Safe**

The use of these confirmations makes for safer business. Spaces are provided for recording all essential conditions of each trade.

Fifty confirmations in triplicate, bound with pressboard and wire stitched, size 5½ x 8".

Order form No. 6 CB. Price 75 cts. plus postage. Three copies \$2.00

GRAIN & FEED JOURNALS Consolidated, 332 S. La Salle Street, Chicago

If you would avoid trade disputes, and differences and prevent expensive errors, use triplicating confirmation blanks. You retain tissue copy, sign and send original and duplicate to customer. He signs one and returns the other.

This places the entire burden for any misunderstanding of your intentions upon the other party and protects you against the expensive misinterpretation of your trades.

RECEIVERS GRAIN SHIPPERS

• W. W. DEWEY & SONS •
CONSIGN TO DEWEY
PEORIA

Geo. E. Rogers & Co.
WABASH BUILDING, PITTSBURGH, PA.

RECEIVERS—SHIPPERS
GRAIN—HAY—MILLFEED—FLOUR

GRAIN ELEVATOR BUILDERS

HORNER & WYATT

Engineers

Designers of Grain Elevators,
Flour Mills and Feed Mills

Consulting engineers to the milling and grain trade

470 BOARD OF TRADE KANSAS CITY, MO.

BURRELL

Engineering & Construction Co.

Daily News Bldg.

Chicago, Ill.

Designers and Builders of

Grain Elevators

Malt Plants

Flour Mills and Industrial Plants
for the past 41 years.

Our service is as near as your telephone, telegraph or letter.
Preliminary designs and cost estimates will be given cheerfully.

Jones - Hettelsater Construction Co.

Mutual Building — — Kansas City, Mo.



Designers and Builders

Grain Elevators

Feed and Flour Mills

Pillsbury Flour Mills Co.
Springfield, Ill.

1,000,000 bus. Elevator

8 Story Flour Mill — 4 Story Cereal Mill

2 Story Warehouse

designed and constructed by us under a
single contract.

Santa Fe Elevator "A"

Kansas City, Kans.



Capacity

10,500,000 Bushels

JOHN S. METCALF CO.

Grain Elevator Engineers and Constructors

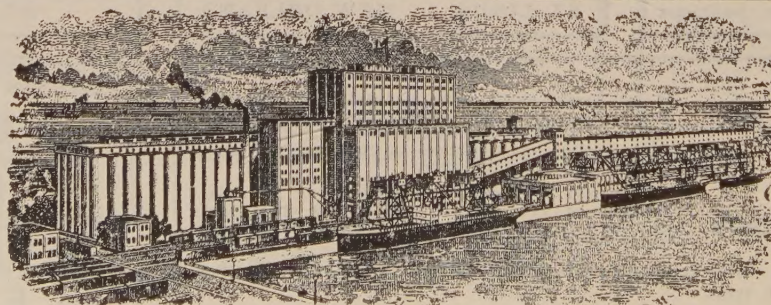
111 W. Jackson Blvd.

460 St. Helen St., Montreal

837 W. Hastings St., Vancouver, B. C.

12-15 Dartmouth Street, London, England

Capacity
5,000,000
Bushels



Equipped with
Four Stewart
Link-Belt
Grain Car
Unloaders

PENNSYLVANIA RAILROAD ELEVATOR AT BALTIMORE

JAMES STEWART CORPORATION

ENGINEERS AND CONTRACTORS

FISHER BUILDING—343 S. DEARBORN ST., CHICAGO, ILLINOIS

GRAIN ELEVATOR BUILDERS

The Barnett & Record Company

DESIGNERS
Grain Elevators

MINNEAPOLIS, MINN.
Mill Buildings

BUILDERS
Industrial Plants

POLK SYSTEM CONCRETE STORAGES

POLK-GENUNG-POLK CO.
Fort Branch, Indiana

Designers — Contractors

HOGENSON

Construction Co.
Designers and Builders
Elevators, Feed Mills, Warehouses
REMODELING
Corn Exchange Bldg. MINNEAPOLIS, MINN.

EIKENBERRY CONST. CO.

CONTRACTORS—ENGINEERS
GRAIN ELEVATORS—FEED MILLS
SEED CORN DRYING PLANTS
P. O. Box 146 Bloomington, Ill.

•• Elevators & Feed Mills

designed, built or remodeled
to meet your individual
needs.

Write, wire or phone us
your requirements for ele-
vator or mill equipment.

Ernest Engineering Co.

Curtis & N. Quincy Sts.
Topeka, - - - - Kansas

YOUR ELEVATOR

can be brought up-to-date for less than
it is costing you to operate it. Ask for
our recommendations and estimates on
modernizing your plant.

Reliance Construction Co.
Board of Trade Indianapolis, Ind.

J. H. FISCH CO.

Elevator Builders and Movers
Barnesville, Minnesota

A. Clemans Construction Co. SOUTH SOLON, OHIO

Engineers Contractors
Fireproof Modern Grain Elevators

ORA LONG MANHATTAN, KANSAS

Builder of
BETTER GRAIN ELEVATORS
Waterproof Pits and Repairing

T. E. IBBERSON CO.

GRAIN ELEVATOR BUILDERS

Feed Mills Coal Plants
Repairing and Remodeling

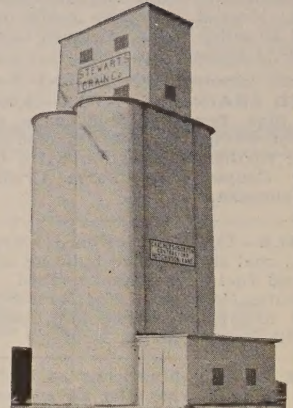
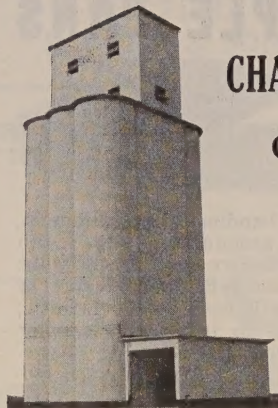
MINNEAPOLIS MINNESOTA

Your grain journal has always been very
useful and satisfactory. I have been 42
years in the grain business and most heart-
ily recommend the Journals to the trade.—
J. Spencer Morrison.

CHALMERS & BORTON

CONTRACTORS
AND
ENGINEERS

HUTCHINSON,
KANSAS



WHY-A-LEAK—Stop It BAD ORDER CARS

cause the loss of many hard earned dollars to
shippers of grain and seed.

MUCH OF THIS LOSS can be saved by the use of
Kennedy Car Liners. These car liners practically
condition a bad order car and enable shippers to
load cars that otherwise would be rejected.

KENNEDY SYSTEM of car liners prevents leakage
in transit and are made for all cases of bad order
cars, consisting of full Standard Liners, End Liners
and Door Liners.

KENNEDY CAR LINER & BAG CO., INC.
Canadian Factory at
Woodstock, Ontario

SHELBYVILLE,
INDIANA, U.S.A.

PROTECT YOUR GRAIN

with the

ZELENY Thermometer System

Estimates cheerfully given.

Write us for catalog No. 6

Zeleny Thermometer Co.

542 S. DEARBORN ST.

CHICAGO, ILL.

Your Elevator's Wants Are Supplied in These Columns

Wanted and For Sale

The rate for advertisements in this department is 25 cents per type line each insertion

ELEVATORS FOR SALE

THREE ELEVATORS—For sale or lease; good harvest prospect. Box 5, Crawfordsville, Ind.

Some **SERVICE** to your ads. I sold my elevator to the first man that answered the ad. But I received a nice number of inquiries, too. Kansas Dealer.

NEWPORT, MICH.—Harrinton Milling Co. plant for sale; good grain country; on NYC Ry. For details write Leo Boudinet, Monroe, Mich., Receiver.

CENTRAL INDIANA—Elevator doing a good business for sale; good reason for selling; will give terms to right party. Address 83P1, Grain & Feed Journals, Chicago.

NORTHERN ILLINOIS elevator for sale; also residence, coal and lumber sheds and stock; cheap to close estate; profitable business. Holcomb-Dutton Lumber Co., Sycamore, Ill.

CENTRAL ILL.—Country grain elevator located in good corn and soybean territory; office bldg. and 2 dwellings; terms if desired. Dunkel Grain Co., Dunkel, Ill., P. O. Assumption, Ill.

COUNTRY ELEVATOR in good farming community; splendid business and good coal yard in connection; located 100 miles north of Indianapolis and 50 miles south of South Bend; retiring. Box 20, Leiters Ford, Ind.

CRIBBED GRAIN ELEVATOR—35,000 bu. capacity, 11 bins; flour and feed house; office and engine room, office equipment; located at Nunda, S. D. For further information write to Omaha Bank for Cooperatives, Farm Credit Bldg., Omaha, Nebraska.

FOR SALE—10,000 bu. cribbed elevator and equipment; coal sheds, office building and dwelling, cob and fuel house, lumber shed. Bradish, Boone County, Nebraska. For further information write to Omaha Bank for Cooperatives, Farm Credit Bldg., Omaha, Nebr.

KANSAS Elevator practically sold after three insertions. Here's what the advertiser writes: "We enclose check for three insertions of our ad. We have had more than a dozen inquiries from our ad and believe that we will be able to effect a sale." This proves conclusively the value of a Journal Want-Ad.

ELEVATORS WANTED

INTERESTED in leasing or buying elevator, preferably located in northern or central Indiana. Address 82M8, Grain & Feed Journals, Chicago.

IF YOU DO NOT find the elevator you want advertised, place your wants in the "Elevators Wanted" section and you will receive full particulars regarding many desirable properties not yet advertised.

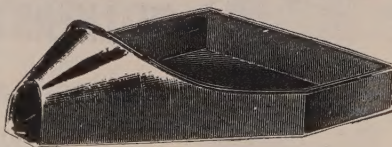
FARMS FOR SALE

FOR SALE—360-acre stock farm, Peoria County, Ill.; good buildings, well watered; ideal for livestock. 185 acres under cultivation. Address 82N1, Grain & Feed Journals, Chicago.

FEED MILL FOR SALE

MILL FOR SALE—40x84 building complete with 28 foot scale; 24 in. attrition mill, oat huller, 3 ton mixer; all complete; new year ago; \$7,500 will handle. Immediate possession, owner going south. Write J. J. Van Gerpen, Buffalo Center, Iowa.

SAMPLE PANS



Formed by bending sheet aluminum, reinforced around top edge with copper wire. Strong, light, durable. The dull, non-reflecting surface of aluminum will not rust or tarnish; assists users to judge of the color and to detect impurities.

Grain Size, 2½x12x16½", \$2.00;
Seed Size, 1½x9x11", \$1.65, at Chicago.

GRAIN & FEED JOURNALS
Consolidated
332 So. La Salle St., Chicago, Ill.

FLOUR MILL FOR SALE

OHIO—200 bbl. modern five story flour mill, with three story adjoining warehouse; all heavy type brick construction; in city pop. 20,000, center of wheat section; transit on three rail trunk lines, 180 ft. siding. Excellent location for soybean processing plant. Details and photo on request from interested parties. Address No. 330 Melmore St., Tiffin, Ohio.

BUSINESS OPPORTUNITY

WILLIAMSBURG, IND.—35 bbl. flour and feed mill and five room house for rent. For particulars write Mrs. Laura Compton, 1920 Broadway, San Diego, Calif.

BARGAIN IF TAKEN AT ONCE—Some one is always looking for an elevator at a good grain point and reads these ads just like you're doing now, so if you wish to dispose of your present property, enlarge your present interests, or embark in the grain business, **USE** these columns to your best advantage just as others are doing. **WE WILL** assist you in the composition of copy free. We are in business to be of service to **YOU**. There is no wrong time to put an ad in the columns of the Journal. **TRY IT.**

SALES AGENTS WANTED

PROVEN NECESSITY for grain elevators, flour mills and processing plants. Outstanding opportunity for sales volume. Must have auto and sell on good commission basis. Territory open in East, Southeast, West and Northwest. State experience and qualifications. Address 82D13, Grain & Feed Journals, Chicago.

Confirmation Blanks

Simple - Complete - Safe

If you would avoid trade disputes and differences, and prevent expensive errors, use triplicating confirmation blanks. You retain tissue copy, sign and send original and duplicate to customer. He signs and returns one and retains the other.

This places the entire burden for any misunderstanding of your intentions upon the other party and protects you against the expensive misinterpretation of your trades.

The use of these confirmations makes for safer business. Spaces are provided for recording all essential conditions of each trade.

Fifty confirmations in triplicate, bound with pressboard and wire stitched, size 5½x8". **Order Form No. 6 CB.** Weight, 9 oz. Price 75c; three copies \$1.95, plus postage.

Grain & Feed Journals
CONSOLIDATED

332 South La Salle St., Chicago, Ill.

KEEP POSTED

GRAIN & FEED JOURNALS
CONSOLIDATED

332 So. La Salle St., Chicago

A merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter.

Gentlemen:—In order to keep us posted regarding what is going on in the grain and feed trades outside our office, please send us the *Grain & Feed Journals* twice each month. Enclosed find Two Dollars for one year.

Name of Firm.....

Capacity of Elevator.....

Post Office.....

State.....

MACHINES FOR SALE

CORN CUTTER and grader, feed mixer, JB mill motor. W. W. Pearson, Reynolds, Ind.

CORN CUTTER & Grader—has motor—used very little. 82A7, Grain & Feed Jnl's., Chicago.

FEED MIXER—one ton—floor level feed—has motor—good as new. Write 82A9, Grain & Feed Journals, Chicago, Ill.

DRYERS—ROTARY—Hot Air—Two used only 3 months; 4 ft. x 15 ft.; will dry all grains. Le-land Dairy Co., Mattoon, Ill.

HAMMER MILL with 25-h.p. motor and all attachments. Priced to sell. Write 82A10, Grain & Feed Journals, Chicago, Ill.

FEED MIXER for sale, has motor, and a late machine. Need space. Will sacrifice. Write 82A8, Grain & Feed Journals, Chicago, Ill.

FOR SALE—One 20 h.p. McCormick-Deering power plant; good condition; cheap operating. Weedman Grain & Coal Co., Farmer City, Ill.

FOR SALE—Rebuilt Attrition and Hammer Mills, Mixers, Corn Cutters, Engines, Motors, Etc. Weaver Sales Corp., Corn Exchange, Minneapolis, Minn.

BARGAIN SALE—1 No. 301 Eureka Double Fan Cleaner; used very little; capacity 75 bu. per hour; price \$85.00. Thos. P. Rose, Shiloh, Va., Distributor of Milling Machinery.

FOR SALE—Two used cracked corn polishers; both in excellent condition. One used only one season. Priced for quick sale. Address 82H3, Grain & Feed Journals, Chicago.

DOAK SPOUT HOLDER—"Best on earth." Price \$10.00, satisfaction guaranteed; full information on request. Manufactured and distributed by Superior Mfg. Co., Albert City, Iowa.

MACHINES FOR SALE

BARGAIN—20" attrition mill, reverse ball bearing drive and 40 h.p. motor now in use, available in 15 days; price and full particulars. Write 82M10, Grain & Feed Journals, Chicago.

MIRACLE ACE hammer mill direct connected to a 75 h.p. motor, complete with starter pipe, etc.; also one Roscoe Ajax oat huller, all in running order; cheap. The Loy Mills, Brookville, Ohio.

AT A SACRIFICE—One Brown-Duvel moisture tester, one grain trier, one sample pan, one four-in-one scale, and several small testing screens for sale. Consumers Coal Co., Sault Ste. Marie, Mich.

SELL YOUR SECOND HAND Machines Now—tomorrow they will not be worth as much as they are today. A shiny machine which has just been in operation sells quicker and brings a bigger price than a dirty, rusty one.

JAY BEE hammer mills, rebuilt guaranteed; V belt drive and direct connected; 1 50 h.p., 1 40 h.p., 1 30 h.p. electric motors; hammers, screens and parts; Ajax oat huller. Indiana Grain Machinery Co., 420 S. Meridian St., Indianapolis, Ind.

FOR SALE—1 elevator, 12" V cups, belt, head pulley and boot, 60' centers Sparks Delta Seal Hand Machine; 1 Carter Disc 22 Disc 25" in diameter; 1 Rotex 40x84 Sifter latest drive; 1 man lift; 2 Elevator turn heads, 1 cast iron, 1 metal; 1 18x24 Oat and Barley Roll Cut for crimping oats, motor driven with V belt drive. F. W. Mann, P. O. Box 67, East St. Louis, Ill.

RECONDITIONED PULLEYS BELTING, ETC.

E. COHN & SONS, INC.
CEDAR RAPIDS, IOWA

SCALES FOR SALE

FOR SALE—10 ton 16 ft. Fairbanks Dial Scale with concrete deck. M. C. Roberts, Farwell, Texas.

STOP! READ! THINK! One advertiser writes, "Your service brought me 24 replies." We can do the same for you. Don't wait, write now.

SEEDS FOR SALE

WHEN YOU want field or grass seed, write us, and we will put you in communication with nearby dealers, who have what you seek. The service is free. Information Bureau, Grain & Feed Journals, 332 S. La Salle St., Chicago, Ill.

MOTORS—GENERATORS**ELECTRICAL MACHINERY**

Large stock of motors and generators, A.C. and D.C., new and rebuilt, at attractive prices. Special bargains in hammermill motors, 25 to 100 H.P., 1200 to 3600 R.P.M. Write for stock list and prices. Expert repair service. V. M. NUSSEBAUM & CO., Fort Wayne, Indiana.

MOTORS-PUMPS: Guaranteed rebuilt electric motors, pumps, etc. Largest stock in Illinois, outside of Chicago. Will take your equipment in trade; also offer emergency motor repair and rewinding service. Distributors for Wagner and Peerless motors, specially adapted for farm and grain elevator application. We offer free engineering advice on your problems. Write us without obligation. New illustrated bulletin No. 23, just off the press, will be mailed on request. Rockford Power Machinery Co., 6th Ave. and 6th St., Rockford, Ill.

SAMPLE ENVELOPES

SAMPLE ENVELOPES—SPEAR SAFETY—for mailing samples of grain, feed and seed. Made of heavy kraft paper, strong and durable; size 4½x7 inches. Have limited supply to sell at \$2.35 per hundred, or 500, \$10.00 plus postage. Sample mailed on request. Grain & Feed Journals, 332 S. La Salle St., Chicago, Ill.



**'Magic Screen'
'Combination'
CORN
— AND —
SMALL GRAINS
SEPARATOR**

A Modernized Super Service Cleaner, supremely efficient, extremely economical — for every use.

S. HOWES CO., Inc., Silver Creek, N. Y.

two Cleaners in one

**Convertible in 30 Seconds**

Erases delays, quickens and cheapens all cleaning: seconds only are required to divert stream to either of the two independent sets of large-area screens, and to adjust the precision regulated air cleaning controllers . . .

**Reduces
Cleaner Investment
50%**

A simplified 2-in-1 Cleaner performing service ordinarily requiring two separate machines—for cleaning corn and also small grains . . . Saves one Motor, one Dust Collector, and half the floor space. Also large saving in operator's attention.

Ask for Bulletin J-363.

Will You Help

Defend Private Business from Burocratic Domination?

A focal point around which the "business families," employers and employees, in agriculture, industry, finance and transportation, may rally in the coordinated defense against state socialism has been created by an established organization which has for the past four years been engaged in combatting the socialistic movement in the field of transportation. The new agency—a Division of the Transportation Association of America—whose Board of Directors is representative of business leadership throughout the entire country, will be known as the AMERICAN ENTERPRISE ASSOCIATION.

In discussing the vital need for the new agency, Donald D. Conn, Executive Vice President of the Transportation Association of America, emphasized that the continued acceleration of present national trends will result in the final control of all business, including transportation, by government.

Transportation Cannot Be Separately Treated

"As a result of the Association's four-year study of the complicated transport industry, it becomes increasingly apparent that the problem of maintaining private ownership in this major economic field cannot be dissociated or treated separately, from trends which threaten to undermine, not only transportation, but the whole structure of free enterprise.

Diversion of Capital to Government

"The dragnet of socialism which is destroying private enterprise in America is best illustrated by the fact that in 1928, 75 per cent of our new capital was available for investment in private business; 25 per cent was utilized for governmental expenditures. In 1938, 80 per cent of our new capital was commandeered by government, leaving only 20 per cent for the expansion of private enterprise. With its lifeblood drained to provide credit for bureaucracy, business has not been permitted to recover from depression, or to perform its normal functions looking to the absorption of the surplus of labor and the expansion of facilities—the replacement of the tools of industry. Recognizing the need and the good flowing from many innovations of Government during this period of stress, nevertheless too many of the major moves have obviously been designed to discredit private enterprise and to throttle the orderly application of this principle toward recovery. Projects originally invoked in the name of 'relief' are now proposed as permanent policies. The American people must now choose between government spending, supported by excessive taxation of all individuals and business, and spending by private industry,

which is continuous and grows with the normal expansion of the country's needs.

Government Has Failed

"It would be utterly unfair to attack every new Governmental policy as unsound, or unnecessary. Some are highly meritorious. But important experiments affecting the economic wellbeing of the country present an unbroken succession of failures, marked only by falling national wealth, increased unemployment, and an unprecedented but steadily rising national debt. We are engaged in mortgaging the earnings of our people for generations to come. For nearly a decade the American people have been mired in depression. If present pump-priming methods are continued it will take another ten years, or until 1949, to raise the total national income to eighty billion dollars, and by that time the national debt will have grown to 63 billion dollars. Present policies mean going into debt \$3.00 for every \$2.00 gained in yearly income. Unless the 'business families' in America, employers and employees, assume a new and enlightened leadership, dedicated to reversing the present trend, national bankruptcy lies just ahead.

Government Expenditures

"More than 175,000 political units—states, counties, municipalities, townships—have the power to spend public funds. The actual expenditures of government in the United States are outstripping current tax receipts by upwards of five billion dollars a year. In 1913, the federal government spent \$693,000,000. In 1937 it spent \$8,185,000,000 or twelve times as much. Twenty-five years ago the gross debt of the government amounted to \$12.36 per capita; in 1937 amounted to \$281.00 per capita, an increase of 2,280 per cent. The federal debt has multiplied 30 times in 25 years. A working man earning \$80 a month is now paying \$123 a year in hidden taxes. In 1938, approximately 21 million persons were receiving benefits or relief from the public purse. Thus the destruction of private enterprise goes on, fostered by politicians and unrestrained by organized business leadership.

Agriculture Enlisted

"With an array of theoretical schemes for regulating the quantity of crops, with wholly unsound loans, with a flood of free paternalistic literature and with an army of payrollers, advocates of state socialism are seeking to convert agriculture to its purposes. Because many of his neighbors cannot resist the appeal of hard cash, the farmer who still has faith in the traditional American institutions has no way to demonstrate that faith. The 'more abundant life through scarcity' has resulted in the destruction of our foreign markets, encouraged importations of foodstuffs, and increased the army of the unemployed. Carried to its logical conclusion, this doctrine will make us a nation of paupers instead of the wealthiest nation on earth. The present plight of agriculture is the direct result of the enforced policies of governmental experiments.

Class War Encouraged

"The movement toward state socialism is not only being felt in industry but is finding its way into the humblest of homes through the active support by government of semi-socialistic labor organizations, whose activities have increased the cost of the necessities of life, promoted class war propaganda, and destroyed the value of the savings of millions of our people invested in private enterprise. Un-American movements, particularly Communism, have been permitted to gain a real and menacing foothold throughout the entire country. Organized minorities, encouraged by government, pursue the destruction of private enterprise, with little restraint or opposition from organized business.

Business Leadership Needed

"Every community, and too many 'pressure groups,' have contributed, in one way or another, to substitute the hand of government for the normal processes of business initiative. Elements of business who should be seeking to restore the functions of government to proper limitations are too apt to consider temporary financial gain from government expenditures as being of greater consequence than the future stability of private enterprise. Only by a renewed and courageous business leadership, extending throughout all cities and communities of the country, can we hope to avoid the certain disaster of our present policies. The AMERICAN ENTERPRISE ASSOCIATION has been established to give such leadership a common meeting ground for a nation-wide defense against the domination of an ever-growing bureaucracy, which would destroy every vestige of individual rights and usurp for itself the provinces and responsibilities of private business."

Mr. Conn explained that the Association has already organized local committees of minute men and women in more than 300 communities of between 5,000 and 50,000 population. It is proceeding on the theory that to defeat the socialistic movement, citizens must marshal their efforts under local leadership. Hence the personnel of these committees has been selected from local leaders in business, in churches and schools, and among labor and women's organizations. The AMERICAN ENTERPRISE ASSOCIATION considers these committees and others to be organized until every community has been enlisted, its front line of defense.

The Association, from its Chicago headquarters, will furnish its committees with factual information on all current national issues related to the welfare of private enterprise. It will depend upon these groups to adopt educational methods to counteract the present trend.

American Enterprise Association

400 West Madison St.

CHICAGO, ILL.

GRAIN & FEED JOURNALS

CONSOLIDATED
INCORPORATED

332 S. La Salle St., Chicago, Ill., U.S.A.
Charles S. Clark, Manager

A merger of
GRAIN DEALERS JOURNAL
Established 1898

**AMERICAN ELEVATOR &
GRAIN TRADE**
Established 1882

THE GRAIN WORLD
Established 1928

PRICE CURRENT - GRAIN REPORTER
Established 1844

Published on the second and fourth Wednesdays of each month in the interests of better business methods for progressive wholesale dealers in grain, feed and field seeds. It is the champion of improved mechanical equipment for facilitating and expediting the handling, grinding and improving of grain, feeds and seeds.

SUBSCRIPTION RATES to United States, Canada and countries within the 8th Postal Zone, semi-monthly, one year, cash with order, \$2.00; single copy current issue, 25c.

To Foreign Countries, prepaid, one year, \$3.00.

THE ADVERTISING value of the Grain & Feed Journals Consolidated as a medium for reaching progressive grain, feed and field seed dealers and elevator operators is unquestioned.

Advertisements of meritorious grain elevator and feed grinding machinery and of responsible firms who seek to serve grain, feed and field seed dealers are solicited. We will not knowingly permit our pages to be used by irresponsible firms for advertising a fake or a swindle.

LETTERS on subjects of interest to those engaged in the grain, feed and field seed trades, news items, reports on crops, grain movements, new grain firms, new grain elevators, contemplated improvements, grain receipts, shipments, and cars leaking grain in transit, are always welcome. Let us hear from you.

QUERIES for grain trade information not found in the Journal are invited. The service is free.

CHICAGO, ILL., JULY 26, 1939

THE MARKETING of the 1939 soybean crop is sure to interest country buyers in the requirements of the standard grades.

A FEW DAYS' rise in rye contrary to the downward trend in other grains for no apparent reason, was explained as an advance leak of the Washington purpose to offer farmers loans on rye.

WEEVIL have destroyed so much grain during recent years, leading chemists are now working earnestly to find a new fumigant which can be depended upon to destroy all weevil in any temperature and under all conditions of storage without blowing up the property. Two of our leading chemical companies are experimenting with methyl-bromide and so far report very excellent results. Neither are ready to make any recommendations; but, both are convinced that this fumigant can be used safely and with satisfactory results. Explosions following the use of bisulphide of carbon are decidedly disconcerting.

IT WILL soon be about time for the A.A.A. to brag about how it raised(?) the price of wheat from \$1.51 in April, 1937, up(?) to 60 cents per bushel in July, 1939. And it spent only a few hundred million in trying.

QUICK WORK by alert employees of a Plain City, Indiana, elevator saved their jobs and the elevator. Their success again emphasized the great advantage of keeping buckets and well filled water barrels at convenient points on every floor. Few fires promptly flooded in their incipency continue to burn.

ELEVATOR OWNERS who have postponed needed repairs and improvements until the new crop is ready for market are now gravely distressed by their inability to obtain the help of experienced elevator builders, although new grain will soon be falling into their receiving pits.

THE DELEGATES to the International Wheat Conference now sitting in London are no nearer to agreement than at previous sessions. Each of the big four delegations insists upon its country being assured first place in the allotment of export quotas. If they granted one of the competing countries first place the losing delegates would not dare return to their native lands.

THE CCC would like owners of farm sealed corn to renew their loans of 57 cents per bushel and hold the corn until Oct. 1, 1940, but borrowers are not crowding the approaches to the government's lending agencies. While good corn is obtainable at 42 cents a bushel in the public markets, farmers will hesitate to pay the CCC 57 cents for the return of their collateral.

THE COMBINES have met with more opposition from the grain buyers handling new grain than ever before. It may be that the frequent rains have helped to increase the average percentage of moisture content in small grain, but grain dealers generally are discriminating sharply against any combined grain cut when wet. Accepting for elevator storage, small grain containing more than 15% is generally accompanied by more than usual hazards.

STORAGE room promises to be at a premium in North America after the harvests, and the fortunate possessors of room should not be too hasty in accepting none too profitable opportunities to fill up right away, when the demand may become more acute later. Now it is reported that Great Britain will accumulate reserves of wheat in North America instead of storing in England. If undertaken in fact this would leave little room for United States grain in eastern elevators, filled with the record-breaking Canadian crop of wheat.

THE GRAIN SHIPPER who has good scales, and has them tested by a recognized authority periodically, need fear no railroad claim agent, since the courts have always held the railroad must settle on the loading rather than the unloading weight. The court presumes the loss occurred in transit and the carrier must pay the difference.

GOVERNMENT LOANS on farm-stored corn and wheat is encouraging the building of small farm elevators to enable farmers to take better care of their grain and facilitate its marketing when the market suits them. Recent reports of such elevators in Michigan, Oklahoma and Kansas give promise of better grain being delivered at country elevators. The rats and weevil will protest vigorously.

NORTH DAKOTA'S grain association is making a determined effort to maintain harmony in different sections of the state, and all buyers who are generally anxious to reduce mounting deficits are willingly co-operating in the discard of unfair methods and bad practices. Many who have worked earnestly to serve their communities without profit are now disposed to place a permanent check on cut-throat competition.

INDUSTRY in other lines is showing unexpected midsummer strength and will be reinforced by fall marketings of small grains and of corn for a year to come at rising prices that must follow the present period of extreme liquidation. Plenty of grain to handle at rising prices spells prosperity for the transportation companies and the country merchants who are the backbone of industry in America.

THE ATTEMPTS of the FSA to organize new cooperative business enterprises without requiring the investment of private capital has met with a much merited rebuke from the Greater North Dakota's Ass'n. Business men of other states no doubt have resented this effort of the Federal Government to promote new ventures, but have not protested vigorously enough to gain much attention. This impractical venture may help to distribute the earnings of the taxpayers but it will not help either the producers or the consumers.

CONTINUED improvement in the condition of the growing crop of corn combined with the 257,127,595 bushels the government is paying farmers to hold out of commercial channels is depressing the market value of corn to the despair of all owners. As the CCC has extended the time for renewing the loans on sealed corn to Oct. 1 none of it will move to market much before the 1939 crop is ready to be gathered, so a continued decline in the price is sure to follow unless the economic law of supply and demand is promptly repealed.

BUYING grain over small capacity scales which are obsolete is a wild speculation in these days of overloaded trucks and trailers.

A WHEAT VISIBLE of 129,515,000 July 22, against 29,207,000 four years ago tells its own story of changed price making conditions. Who wants to carry the extra hundred million bushels? The risks of ownership always go with the grain.

ELEVATOR OWNERS who employ men to paint their elevators should be careful to make a contract for the painting or else take out compensation insurance for those employed in doing the work. Serious accidents to inexperienced painters recently have caused two elevator owners more than usual worry.

THE COST of carrying slow payers on the books is always burdensome. Ohio dealers are now making a determined effort to relieve their retail merchandise departments of slow accounts and are striving to encourage their patrons to pay cash. Some are offering a liberal discount for cash and insisting on charging interest for non-payment after thirty days, but the greatest difficulty is to secure a firm stand against slow credits by all retailers at the same time. District committees now at work have found all dealers weary of posting and billing slow accounts so that the cost of carrying them will, no doubt, soon drive all to abandon the credit system.

The National Meeting

The arrangements for the 43rd annual meeting of the Grain & Feed Dealers National Ass'n, which was organized in November, 1896, are now rapidly approaching completion and give promise of representing more sections of the grain trade than ever before.

Grain and feed dealers have been so restricted and handicapped by bureaucratic regulations and governmental competition, all members of the trade are deeply interested in finding some quick relief from the depressing domination of the bureaucrats. If the grain trade is ever to function efficiently and economically, it must have freedom to serve as men of experience deem essential to efficiency.

The holding of grain off the market as now directed by different governmental agencies has helped no one but the bureaucrats employed, but it has injured beyond measure both the grower and the handler of grain.

It behooves all interested in the safe marketing of grain to join in determining the best route out of the chaos prevailing in the grain market today, and the National meeting at Minneapolis, October 2nd and 3rd, affords an opportunity for the experienced men of the trade to point out the safe and quickest way.

Farm Sealed Corn Loans

The Department of Agriculture has asked for bids on a large number of steel bins to be used for storing the farm sealed corn of which it expects to become owner in the near future. These bins are to be of 1,000 and 2,000 bushels capacity, the purpose being to store the sealed corn which farmers neglect to recover when their 57c government loans become due.

Corn has made daily use of the market price toboggan for so long, no farmer outside of a mad house would think of paying a 57c loan to recover 38 cent corn and, of course, he will need his own cribs, as soon as the 1939 crop matures, to borrow more easy money.

Some of the AAA officials seem to find delightful satisfaction in the fact that "the sealed corn will not be dumped on the market," overlooking the fact that the longer the surplus stocks are held in the public show windows, the greater will be the depressing influence on grain values. While the loans on the sealed corn will mature August 1st, the government has voluntarily extended the time for redemption of farmers' loans to October 1st; thus continuing its depressing influence for two months. It now seems certain that the CCC will lose at least 20c a bushel on 257,127,595 bushels of corn of the 1937 and 1938 crops, and if stupidity permits the lending of 57c a bushel on sealed corn of the 1939 crop, the government will probably lose even more than the \$51,000,000 now in prospect on the loans already made.

As the government would have no use for the steel bins after the ever normal granary delirium has subsided, it would harvest another loss of at least \$8,000,000. When private enterprise loses all the money in sight or obtainable on any impractical scheme, it stops experimenting and goes to work, but the Washington bureaucrats will never stop until all the taxpayers' savings have been dissipated.

If the government is determined to hold the corn on which it has advanced 57c, it would be much cheaper for it to utilize elevator storage bins now idle, because of the holding of a large volume of grain on the farms. The CCC seems perfectly willing to pay 6c a bushel for expensive, hazardous farm storage, but unwilling to pay more than 2c or 3c for country elevator storage where facilities for turning, treating and blowing grain are of the best. The grain growers have always found it to their advantage and profit to use the facilities offered by modern grain elevators for marketing their crops, but the AAA and CCC seem to be possessed of a deep-seated prejudice against the use of established facilities.

Had the large volume of grain now back on the farm because of government loans been put on the market when har-

ested, much of it would have gone into consumption long ago and the market relieved of its depressing influence.

Handling Government Grain for 2c

Every grain merchant has considered the 2c handling charge tendered elevator operators for receiving, storing, loading and guaranteeing weights at destination to be less than the elevator man's cost of this service.

All of the state grain dealers' associations protested most vigorously against continuing to serve the government for so small a fee, yet no recognition of their protest has emanated from the AAA. The government importunes farmers to store corn on the farm and even lends them more money than the corn is worth and on top of this, offers them a storage fee of 6c a bushel in advance of storing the grain, so that farmers not having cribs can build them before new corn is shucked.

Such discrimination against the man who has put a lot of money into elevator facilities to help farmers market their grain is neither fair or reasonable. A rat-proof crib can be built in most parts of the corn belt for 6c a bushel and it will last several years.

"Little Man, What Now?"

Of greatest immediate concern to every grain dealer in the Corn Belt is the problem of what will be done with Uncle Sam's sealed corn. Farm cribs are already loaded with corn sealed in 1937 and 1938. Terminal elevators and central market elevators are crowded with sealed corn of previous crops that was taken over by the CCC and with wheat on which farmers have taken government loans. Few country elevators have much more space than they need for their own operations, few are licensed and bonded under regulations satisfactory to CCC officials. Meanwhile another bumper corn crop is growing to a most promising maturity.

Suitable farm cribs cannot be built for the 6c a bushel storage allowance proposed by the CCC for holding corn on the farms for another year. Farmers who offer opinions show an inclination to let CCC officials take their sealed corn baby to do with as they please, in order to clear their cribs for the 1939 crop. With the present prices of corn, these farmers consider corn on which they borrowed 57c as a good sale to our bureaucrats.

Out of the involved economics surrounding the actual and potential physical volume of corn must come some loosening of the bureaucratic regulations and red tape governing storing and handling of either the old or new crops as well as increased compensation for the country elevator operators who handle grain for the government.

The New Transportation Act

Now that a redrafted transportation act is before Congress a chorus of special interests is demanding loudly that their class be favored. The clamor is for regulation of river transportation, on the ground, as stated by the senator from Nebraska, that they compete with the regulated railroads.

In this demand that the waterways be shackled, the proponents are losing sight of two fundamentals, the first of which is the public interest which is best served by untrammelled agencies performing their functions at lowest cost.

Visualize what might occur on the Erie Canal, with boatmen required to hold certificates of convenience and necessity, limiting the number of boats, and the Interstate Commerce Commission prescribing the maximum and minimum rate on grain from Buffalo to New York. Would that be in the public interest? Not at all. The consequent increase in the charge for moving grain from the west to Europe would lower the price obtained by the American farmer for his crops.

The legislators at Washington if guided by the light of history will hold fast to the system of free private enterprise that has made America a prosperous nation, rather than permit legislation that by piece-meal will drift us into a totalitarian state.

In our own grain trade free competition has been carried to the extreme so no one can make a dime without performing a service to earn it, the result being that grain is handled from producer to consumer at a lower margin of cost than any other product. In the totalitarian states we find production hampered by a multitude of incompetent overseers not interested in maximum production because such strenuous effort will gain them individually nothing.

It is interference with the freedom of railroad management by government that is preventing the rails from giving service at low cost. Wages and working conditions on the railroad are controlled not by the managements but by the Railroad Labor Board. Instead of equalizing

opportunity between the rails and the waterways by piling a burden on the waterways, let the legislators accord more freedom to the railroad managements. Permitted to cut operating costs, the railroads soon will get back all the business lost to the highways and waterways that they can carry profitably.

Country elevator operators and their farmer patrons need the railroad more than they do the waterway. Nearly all grain shipping stations are situated inland, far from a waterway, and will benefit most from lower rates by rail, made possible by striking the bonds from the rail carriers.

"Every County to Feed Itself"

Competition of the government with private enterprise has proved harmful to competitors of the government's Mississippi River barge line and to the electric power companies in the Southeast, being driven out by the T.V.A.

Competition of the government with private bankers by lending money at low rates on flimsy pretexts has brought down the rate of interest and ruined the banking business.

Competition of the government against country feed mills is the latest threat. No private feed mill operator situated at a point where the government establishes a grinding plant could stay in business while the government is eagerly striving to do business without profit and to dissipate its capital.

Beginning with the July 1 appropriation of \$40,000,000 the Rural Electrification Administration will finance community processing centers thruout rural America. The nucleus in each community will start as a canning plant, hatchery, refrigerating locker plant or feed mill, the R.E.A. providing 80 per cent and local subscribers 20 per cent of the capital.

The chief of the R.E.A. and his staff recently inspected a feed mixing and distributing plant at Litchfield, Minn., presumably to get ideas to incorporate in the initial construction contemplated, at first, of one model feed grinding plant in each state.

With an investment of 80 per cent it is to be expected the R.E.A. will lay down rules for the operation of the plants, and when default is made in payments on principal and interest, take over the property and continue the mismanagement. What next?

FUMIGATING grain or screenings with bisulphide of carbon not only voids all fire insurance policies, but is accompanied with a dangerous explosion hazard. The gas has exploded in a number of grain handling plants, when it was being used to exterminate weevil, with more disastrous damage to the plant than weevil could do in a century.

County Agent Not Necessary

The fiscal court of Jackson County, Kentucky, employed W. R. Reynolds in April, 1929, as county agricultural agent for a term of four years at a salary of \$500 a year. He held unpaid salary warrants amounting to \$1,800 when five taxpayers intervened in a suit by the fiscal court to gain approval by the circuit court of a bond issue to pay off a floating debt of \$23,646.

The taxpayers claimed that the warrants issued to the county agent were invalid. The circuit court, and the court of appeals of Kentucky on Jan. 18, 1938, so held "that a county agricultural agent is not an officer whose salary must be provided by the fiscal court, since the services are not essential to the conduct of the ordinary business of the county."

If the county's revenues for the year had been exhausted a contract employing a county agricultural agent would be in violation of Sec. 157 of the constitution.—*Jackson County v. Madden*, 112 S.W. 2d, 986.

Damage to Grain Cargo

A ship loaded grain in British Columbia with lumber on top of the grain, which was damaged to the extent of \$500 by moisture from the lumber.

The shipowner paid the damages to the holders of the B/L and made claim against the charterers, the charter containing a clause "Charterers are to load, stow and trim the cargo at their expense under the supervision of the captain."

The Court of Appeal at London, Eng., ruled in favor of the Court Line, Ltd., owner of the steamship Ovington Court, and against the charterers, the Canadian Transport Co., Ltd.

It was contended by the charterers that this clause left the obligation of stowage, as between ship and charterer, solely with the ship, and that the words "under the supervision of the captain" imported that he had to give directions as to the whole of the stowing, consequently, the charterers had no obligation in regard to it and that, therefore, their primary liability to indemnify the owners never arose.

The Court of Appeal refused to accept this view. It was of opinion that the effect of such a clause is to transfer the duty and obligation which would otherwise rest on the shipowner to the charterer of stowing the cargo in the way it ought to be stowed and that, therefore, the charterer was obliged to indemnify the shipowner against damage due to wrongful stowage.

The charterers resisted the claim on another ground. The charter party contained a provision that in the event of damage to the cargo the shipowners would give the charterers the benefit of their club insurance so far as the rules of the insurer allowed. The charterers contended that in view of this provision they were not liable as the shipowners were bound to give them the benefit of their insurance. Against this it was contended that the rules of the insurers did not allow this, as those rules provided that the insurers could recover from third parties any damages due to "such neglect," and that no assignment of the cover to charterers or any other person should be deemed to bind the insurers.

The Court of Appeal held that the words "as far as the club rules allow" rendered inoperative the clause giving the charterers the benefit of the owners' insurance, since the rules provided that the insurers were entitled by way of subrogation to enforce the insured's rights against third parties including charterers.

The Court of Appeal therefore held the charterers liable for the claim.

Canadian Line Companies to Pool

Parliament having enacted a law to make payment for wheat at the fixed price thru pools to farmers the line companies in the western provinces operating 3,500 elevators have decided to co-operate by operating a pool, the wheat taken in by them to be sold thru the Canadian Wheat Board as selling agency.

BE STRONG

By MALTBE D. BABCOCK

Be Strong!

We are not here to play—to dream, to drift.
We have hard work to do and loads to lift.
Shun not the struggle—face it; 'tis God's gift.

Be Strong!

Say not the days are evil. Who's to blame?
And fold the hands and acquiesce. Oh shame!
Stand up, speak out, and bravely, in God's name.

Be Strong!

It matters not how deep entrenched the wrong,
How hard the battle goes, the day how long;
Faint not—fight on! Tomorrow comes the song.

Asked—Answered

[Readers desiring trade information should send query for free publication here. The experience of brother dealers is most helpful. Replies to queries are solicited.]

Rental of Site on Right of Way?

Grain & Feed Journals: I am leasing a strip of land about 35x266 ft., containing nearly as many square feet as three lots near it.

I told the railroad company an offer of \$50 a lot had been made for some in a better location, which would make \$150 for about the same amount of ground as I have leased. Double this would make \$300 and at 6 per cent \$18.

The railroad company values the tract at \$1,250, which at 6 per cent makes \$75, claiming that is a low rental at \$6.25 per month.

How can I get a fair valuation on the land that the P. & E. Ry. will recognize?—Geo. C. Arnold, Oakwood, Ill.

Ans.: Altho the railroad company has a legal right to ask an exorbitant rental the tenant has the privilege of moving off and leaving the railroad without revenue from the land.

The elevator operator should offer the railroad company a fair rental, tendering a check for the amount for the specified term as stated on the check for the specified land.

If the railroad company refuses the reasonable offer it indicates the management prefers to have the elevator move off and ship grain by truck instead of rail; and that the county assessor should be notified of the high valuation placed on its land. It may be advisable for the elevator operator to call the attention of the railroad management to these matters that it may have overlooked.

Recourse on Grain Contract?

Grain & Feed Journals: For several years we have been using your Form 10DC (Improved) for the purchasing of grain from our customers.

We have a case coming to trial within the next few weeks in which one of these contracts will be involved. Our lawyer seems to be rather dubious as to the legality of this contract. We were always under the impression that this would be construed by any court as a bill-of-sale. For our lawyers' information, we would like to know if you would give us any citations of authority or any cases where this contract has been upheld in the court so that we can pass this on to our lawyer.

In this particular case the customer signed on the first line, and the day the contract was made, we did not give him any money on the purchase, but it was agreed that he could draw \$100 within the next few weeks, and fifteen (15) days later we advanced him \$100, but it was not put in the contract. However, we have his canceled check.

The above mentioned contract was signed November 4, 1937, for 600 bushels of corn to be delivered to our elevator on or before March 1st, 1938, at the market price on the day of delivery. Some time in January, 1938, the landlady on whose farm this corn was grown, sent her trucks onto the farm that our customer had this corn stored on, and hauled it all away.

If this bill-of-sale will stand up in court, we possibly would have recourse to the landlady.—L. R. L.

Ans.: The contract is legal and binding on the tenant, who must deliver or stand suit for breach of contract.

The contract is not a chattel mortgage or bill of sale, for the reason the location of the grain is not described and it does not specify any particular lot of grain. Seller can get the grain anywhere to apply on contract.

Buyer's recourse is to start suit, get judgment and then levy on any property of the seller that can be found. If he has no assets buyer can do nothing under any contract.

Old Claims for Shortage?

Grain & Feed Journals: What was the name of the man who had charge of settling all grain shortage claims on cars of grain taken over by the U. S. Government during the World War? I understand there have been some claims settled not so long ago.—J. A. Miles, Fayetteville, Ark.

Ans.: John H. Howard, manager Claim Department, U. S. Railroad Administration, Washington, D. C., had charge.

Rules for settlement of claims for shortage in shipments of grain were promulgated by W. G. McAdoo, director general of railroads, Nov. 28, 1918, and published in the Journal Dec. 25, page 982, as General Order No. 55.

P. P. Quist Passes On

The passing of P. P. Quist, of Minneapolis, Minn., signed finis to one of the most colorful and vigorous careers among state weighing and inspection departments. He was 84 years old, and had lived since 1934 in retirement, but broke into print occasionally with his convictions on the purposes and methods of operation of state weighing services, and maintained



P. P. Quist, Minneapolis, Minn., Deceased.

correspondence with state weighing departments.

Born in Sweden, Mr. Quist was brought to this country while still a youngster. He entered business life at an early age, operating a farm implement and hardware business at Winthrop, Minn., from 1881 to 1900.

Mr. Quist became head of Minnesota's state weighing department in 1900, when the legislature enacted a law removing the grain weighing department from the control of the governor, and placed it under the supervision of the Railroad & Warehouse Commission. He continued to head the department until his retirement in 1934.

During his tenure as state weighmaster, Mr. Quist was appointed by President Taft as chairman of a commission to establish standard weights and measures.

A careful and exact man, Mr. Quist brought the Minnesota state weighing department to an excellence that left no question on Minnesota state weights.

Ewin L. Davis has been re-appointed a member of the Federal Trade Commission for a term of 7 years.

Coming Conventions

Trade conventions are always worth while, as they afford live, progressive grain dealers a chance to meet other merchants from the same occupation. You can not afford to pass up those opportunities to cultivate friendly relations and profit by the experience and study of others.

Sept. 19. Ohio Grain, Mill & Feed Dealers Ass'n. Greenville Golf Club, Greenville, O.

Oct. 2, 3. Grain and Feed Dealers National Ass'n, Nicollet Hotel, Minneapolis, Minn.

Oct. 19, 20. Southern Mixed Feed Mfgs.' Ass'n, Biltmore Hotel, Atlanta, Ga.

Feb. 6, 7, 8. Farmers Grain Dealers Ass'n of North Dakota, Bismarck, N. D.

Mar. 31, Apr. 1, 2, 3. Society of Grain Elevator Superintendents, Royal York Hotel, Toronto, Ont.

N. D. Protests FSA Financing of So-Called Co-ops

Fargo, N. D.—An appeal to the Roosevelt administration to prevent injury to small business concerns of North Dakota by federally financed cooperatives—in which farmers have no investment—was made in a letter to C. B. Baldwin, assistant administrator of the Farm Security Administration. Copies went to Harry L. Hopkins, Secretary of Commerce, and to W. A. Harriman, chairman of the Business Advisory Council.

Formulated by Herman Stern, president of the Greater North Dakota Association, the appeal recited the fact that representatives of the FSA are being paid federal salaries and expenses while engaged specifically in the organization of cooperatives. The units are then offered 100 per cent capital loans, with farmers' notes comprising the only collateral advanced by the borrowers.

"We have asked the Department of Agriculture, and the Department of Commerce to send an impartial representative out into the northwest, to investigate this program," Mr. Stern said. "We would like to show such representative that our farmers are being encouraged, urged, persuaded, and sometimes actually coerced, into affiliating with these new cooperatives. Principal types of business into which the farmers are being led include grain elevators, oil stations and retail machinery distribution.

"Organizers pay little attention to the facilities now available in any of these business fields when they enter a territory to undertake the promotion of cooperatives, and we have the spectacle of new grain elevators being promoted in some areas which have not produced a normal crop for five or more years, but which have been served during that period by a number of private elevators, each operating at a loss."

Blaming politicians for engendering class hatred, by giving farmers the impression that businessmen are amassing great wealth, at the expense of the man on the farm, Mr. Stern declares that the fine, understanding relationship which formerly existed between urban and rural residents is seriously endangered.

Revised United States standards for milled rice and amended moisture limits for Southern rough rice will become effective Aug. 1. The principal change for milled rice, both for that produced in the South and that grown in California, is in moisture limits. The limit for grades above sample grade for both areas is changed from 14.5 to 15 per cent. The moisture limits for rough rice grown in the South are being changed from 14 to 14.5 per cent. Limits for broken kernels that pass thru the No. 6 sieve have been revised and made the same for the long-grain and short-grain varieties.

Dust Explosions and Their Prevention

By C. W. GUSTAFSON, Chief Engineer, Mill Mutual Fire Prevention Bureau

One of the earliest explosions of grain dust occurred in the Washburn Flour Mills at Minneapolis, on May 2, 1878. In this explosion, eighteen men were killed and three flour mills were completely destroyed by a series of explosions. Since that time, there have been numerous explosions, many of which have escaped record.

A combustible dust, like combustible gases or vapors, forms an explosive mixture when mixed with air within certain proportions. Most of us are familiar with the operation of the carburetors on our automobiles. We know that when the mixture of gasoline vapor and air entering the cylinders is too "lean," the machine spits and sputters. Likewise, when the mixture is too "rich," but between the two adjustments of the carburetor there is one point where the most efficient operation is obtained. So with a combustible dust, if too much or too little dust is present in the air, no explosion occurs, but when the mixture is just right, an explosion of tremendous force is obtained.

In tests which have been carefully conducted, it has been found that seven ounces of cornstarch in suspension in a room having a volume of 1000 cubic feet forms an explosive mixture with the air in the room. A prominent chemist has determined that a 98-pound sack of flour evenly diffused through a room 10x20x20 and ignited would cause an explosion exerting sufficient pressure to raise a weight of 2500 tons a distance of 100 feet.

More startling is the statement of one investigator who has ascertained that one cubic foot of grain dust in suspension in air to proper proportions has a potential destructive force equivalent to 86 pounds of dynamite. That dust is dynamite is, therefore, no idle statement. Reinforced concrete walls seven inches thick have been shattered to bits by a dust explosion, and in one cereal mill explosion, pieces of wreckage were found over a mile away from the building.

Most of the serious explosions have appeared as a series of blasts, the primary explosion being of small extent but of sufficient pressure to dislodge accumulations of dust on walls, beams, window sills, and machine surfaces which is in turn ignited. This proceeds in a series of events until the igniting agency is removed or the pressures are relieved by destruction of parts of the building or blowing out of windows.

In the Northwestern Elevator dust explosion in Chicago on March 19, 1921, there were two explosions in close succession. The first one small, the second a tremendous blast, which was heard for miles and was attended by a compression wave which broke store windows five miles from the property.

The trade press has been diligent in reporting grain dust explosions as they occur. Mill Mutual engineers have investigated numerous explosions, and their condensed reports usually are published in the various grain trade journals. By way of review, however, let us mention briefly a few to bring forcibly to your attention what dust explosions mean to the industry:

Belgrade Hord Co., Belgrade, Nebr., Aug. 30, 1929. Three injured. Property loss \$2,000. Foreign material entered three-pair-high roll in which feed was being ground. Explosion blew top of building off and did other structural damage. Foreman and helper were blown out through a door, the foreman being badly burned. The only protection ahead of the mill was a permanent magnet separator and a set of magnets.

Western Maryland Elevator, Baltimore, Aug. 20, 1930. Six killed, fourteen injured. Property damage reported as \$250,000.

Hogan Mill Feed Co., Kansas City, Aug. 22, 1930. Two killed, two injured. Property loss estimated at \$75,000.

E. F. Carlston Elevator Co., Minneapolis, Aug. 26, 1930. Two killed. Property loss estimated at \$100,000. Possibly caused by foreign material in grinder.

Nebraska Consolidated Mills, Omaha, Dec. 13, 1931. One killed, nine injured. Property loss \$50,000. Caused by breakage of an unprotected electric light being lowered into a flour bin.

Acme-Evans Co., Indianapolis, Dec. 16, 1931. No casualties. Property loss \$65,000. Caused by friction in elevator leg.

Larabee Flour Mills Co., Wellington, Kans., Feb. 25, 1931. No casualties as men had just left the elevator. Property loss \$63,000. Cause reported to be a hot bearing.

Kansas-Missouri Elevator, Kansas City, Feb. 18, 1932. Three killed, eight injured. Property loss estimated at \$500,000. Caused by discarded lighted cigarette with consequent stirring up of dust by fire hose.

Santa Fe Elevator, Chicago, Dec. 23, 1932. Two men killed, eight injured. Property loss estimated at close to \$500,000.

More recent explosions occurred in the plants of the Krause Milling Co., Milwaukee; The Purina Mills, Nashville, Tenn.; the Pillsbury Flour Mills, Enid, Okla.; and the Gillette Grain Co., Nashville.

The disaster which cost the lives of 9 men and destroyed some \$4,000,000 of property in Chicago May 11, 1939, is a stark reminder of the destructiveness of grain dust.

What can be done to prevent dust explosions with their accompanying killing and maiming of workmen and the destruction of property? This might well be discussed under three separate headings:

- (1) Elimination so far as possible of suspended or floating dust and removal of accumulations of dust.
- (2) Removal of sources of ignition.
- (3) Reduction of effects of an explosion and the extinguishing of fires which may serve as source of ignition.

Under the first heading comes that all important "Housekeeping." Nothing is as essential in the prevention of dust explosion as keeping the plant, whether a mill or elevator, free from accumulations of grain dust. This does not mean merely giving the floors a casual sweeping when time is available, but a thorough cleaning maintained on a continuous schedule basis. All dust which has settled on horizontal surfaces, such as beams, window ledges and the tops of machines as well as that on walls should be removed. Such dust is usually that which is involved in the disastrous secondary explosions. Spouting, elevators, machines and bins should be kept tightly closed and in good condition so as to prevent issue of dust. Grain should not be spouted through the open air for one should keep in mind that whenever grain is moved or disturbed, a certain amount of fine dust is liberated. Dust should not be permitted to accumulate in excessive quantities. Cyclone dust collectors should be vented to the outside of the building.

A complete dust control and collecting system is needed to prevent the dangerous floating dust from escaping into the building. This is especially true in sections of the plant where the grain flow is in the open, as at trippers, conveyor belt discharges and at bin gates. The application of suction to such points will work wonders in reducing the amount of dust in suspension. Provisions for suction on elevator heads, on scale hoppers and garners, and similar places is also of great importance. Incidentally, such improvements also improve working conditions for the men. Even the venting of elevator heads, bins, and garners, to the outside will be found to be a great help. In the complete system floor sweeps should

be included in order that the labor incidental to the entire removal of swept-up dust may be minimized.

Second Consideration.—The removal of causes of ignition. Foreign material such as iron or steel objects entering grinding machinery or striking against the concrete walls of bins has proved to be a serious offender. To protect against this hazard, there should be an effective electromagnetic or pneumatic separator ahead of all feed and screenings chutes. Ordinary permanent magnets are of small value and little confidence should be placed in them.

The removal of foreign material from the grain as it comes to the elevator from cars or farmers' wagons is a more difficult matter, but some elevators have placed screened gratings over their receiving sinks having a mesh small enough to remove at least the larger objects. The striking of sparks is not the only consideration, as large objects may lodge in elevator legs and cause sufficient friction heat to serve as a source of ignition.

It is important that bearings be maintained in proper condition; well, but not too well, lubricated and properly babbitted. Overheated bearings have been the cause of many explosions and fires. Bearings should be kept clean and free from accumulations of dust, oil and grease. In this connection, we feel obliged to mention anti-friction bearings of the ball or roller type which so many progressive mill and elevator owners have found to be admirably suited to their needs.

Machinery should be given the care necessary to its efficient and safe operation. The elevator leg is probably the most hazardous device in the mill or elevator but with proper maintenance, the hazard is materially reduced. It is important that the head and boot pulleys be kept in proper alignment so that they do not strike or rub against the head or boot casing. Cup belts should have sufficient tension so as to prevent the cups from striking the leg.

A most frequent source of ignition is electrical equipment. The breakage of electric lights is a common offender. For this reason, it is important that electric lights be protected by substantial guards and dust-tight globes, especially those used as portables and those in the basement, tunnels, and similar dusty places. Fuses are required to be enclosed in dust-tight metal cases as are all switches.

Motors having slip rings or other sliding contacts are a source of danger and should be enclosed in a suitable fire resistive room or replaced by motors of the non-sparking type. It is usually found most difficult to keep motor windings reasonably free from dust, as a consequence, the breakdown of motors is a common occurrence.

The best solution of this problem is offered by the enclosed types of motors which are now available at reasonable prices. Such motors require no "blowing out" and should they burn out from overload or any other cause, the flame and arcs are confined within a substantial casing.

Bearings on motors also need frequent inspection and attention to prevent the rotor from coming into contact with the stator. Needless to say, all wiring for both lighting and power should be in rigid steel conduit and this should be properly grounded.

In spite of all that we do to prevent the existence of the conditions favorable for a dust explosion, it is expected that we will continue to have such explosions. However, a great deal can be done toward reducing the effects of explosions. Every fire is a potential dust explosion, hence the need for keeping all fire extinguishing equipment, such as water barrels and buckets, standpipe and hose, chemical extinguishers, and sprinkler systems in proper condition for immediate use.

In the case of tightly constructed fire resistive elevators with a small amount of window area in proportion to heavy wall area, it has been found that very often sections of

[Continued to page 61.]

Letters from the Trade

[The grain dealers' forum for the discussion of grain trade problems, practices and needed reforms or improvements. Dealers having anything to say of interest to members of the grain trade are urged to send it to the Journals for publication.]

More Intelligent Selection and Handling of Barley Necessary

Grain & Feed Journals: The average grain man can learn a great deal about the grain business that he never dreamed existed. We are going to have a radical change in our methods of handling barley in the near future, and the birth of such time will come about when Ruppert's or Ballantine's decide to make their own malt from certain varieties that will produce a desirable finished product; the other breweries will have to do the same or force the few closed corporations of maltsters of this country to stop using Wisc. Ped. 38 and also these round lots that are badly mixed with several varieties for a straight Oderbrucker or other Manchurian type.—W. A. Clark, Colman, S. D.

Wagon Scales Useless in a Truck Age

Grain & Feed Journals: Just keep up the good work you are doing. Only about 30 per cent of the Grain Elevators in Illinois have scales that are long enough and heavy enough to weigh auto trucks loaded with grain. About 70 per cent of the elevators still have 10 ton 16x8 scales; a few have smaller scales.

I believe that with proper government management as concerned with elevators and a good year or two in which all can make money, every one of these elevators will have scales that are truly auto truck scales—and not wagon scales. Scales with a 100 per cent end load capacity.

Ask elevator men what the most important thing around their elevator is and 99 per cent will answer that their scales were by far the most important, for it is over their scales that their money values are determined.

The 70 per cent have scales that were made to weigh evenly distributed loads like in a wagon and were never intended to weigh auto truck loads where most of the load is on the rear axle.—A. J. Cook, Springfield, Ill.

80% of Wheat Stored to Be Pledged for Loan

Grain & Feed Journals, Consolidated: Never in the history of the grain trade have we gone through such chaos and unheard of conditions as exist in Texas, for even in the Farm Board days there was nothing like the demand now being made on the terminal elevators and we are now in the unique position of trying to drive away business in place of soliciting it.

One factor that helped to bring this condition about is the complete absence of loading orders. In former years we loaded out at least 25% of our receipts every week, but this year we have loaded out less than 1%.

We are confident that fully 80% of the wheat in our elevators will be pledged for a Government loan, as we are getting orders to transfer it just as fast as we can make out the receipts.

We have recently installed an air conditioning plant in our office, and the comfort we obtain from this modern luxury does, in some measure, compensate for the worry and harassment of too much business.—The Ft. Worth Elevators & Warehousing Co., G. E. Blewett, Vice Pres. & Gen'l Mgr., Ft. Worth, Tex.

Want Radio Markets More Frequently

Grain & Feed Journals: For the past 15 years radio station WDZ of Tuscola has put on the air at 30 minute intervals the Chicago grain market, but now they have drastically curtailed the service, only allowing the Bush Brokerage office four broadcasts a day.

This is a disappointment to thousands of grain elevator offices thruout Illinois and parts of Indiana, Iowa and Missouri. Three or four opportunities to secure the Chicago market during a session is not pleasant to contemplate, after having had a market ready for your radio reception each half hour. Surely a half hour service would be quite popular and need consume only 2 or 3 minutes.—Stonington Cooperative Grain Co., I. W. Larrick, Mgr., Stonington, Ill.

Careless Operation of Feed Mill May Cause Difficulty

Grain & Feed Journals: Whether fires may be caused by foreign substances going thru feed mills is open to debate. One man's opinion is about as good as another's. We have heard of a few cases where fires have occurred in mills but do not know of any which could be laid definitely to metal going thru a grinder.

We have also heard of a few mills exploding, due sometimes to carelessness on the part of the operator and at others to metal going thru the mill. In California a number of years ago a College Professor of Chemistry was willing to swear the explosion of the mill was caused by a defect, yet there was positive evidence something had gotten between the grinding plates. Whether this was caused by a plate getting loose in the mill itself or by something getting in the mill is something no one could positively determine.

The whole subject is extremely vague and it is hard to find definite proof of accidents or fires.

In this part of the country very few mill fires start near grinders so that our experience is considerably less than if we were in the heart of the Middle West where fires are more prevalent.

We heartily advocate the use of electro-magnetic separators and endeavor to influence our customers in the use of these machines. There is no question that they are much more powerful and more effective than the ordinary horseshoe magnet or the ordinary fixed magnet, but from our own experience we have also known cases where metal has gotten by even the powerful electro-magnetic separators. No piece of equipment is absolutely fool-proof, but a magnetic separator properly used is almost positive assurance no metal will reach the grinder.

Some mills are well constructed and adapted to the work for which they are installed, while others are only pieces of junk which never would be worth anything. Unfortunately, present market conditions aid the sale of cheap machinery, and for this reason, we think the insurance inspectors might be justified in blaming the equipment to a certain extent.

This is ordinarily more prevalent through the Middle West than in this section of the country where the feed grinding and mixing

business is better established and calls for higher grade equipment. We went thru this same condition in the East, when feed grinding and mixing started, and gradually the cheaper machines were replaced by better. There is no question that cheap machines thru the Middle West will eventually be replaced by better machines which will cut down the hazard.

We would advocate the use of electro-magnetic separators wherever possible to prevent fires and damage to milling machinery and would also advocate the use of just as good machinery as the elevator operator is able to buy. Quality pays in the long run.—R. A. Lasher, Munson Mill Machinery Co., Inc., Utica, N. Y.

"Insured Tickets" in Northwest

At a regional meeting June 8 of the Pacific Northwest Grain Dealers Ass'n at Pullman, Wash., with 73 dealers present a consensus of opinion showed 100 per cent disapproval of the "insured receipt" requirement of the Commodity Credit Corporation. Seven men were selected from those present at Pullman to meet with John D. Goodloe, a Washington, D. C., official of the C.C.C.

This com'te consisted of the following: H. E. Morrison and Eugene Kelly of Walla Walla; Charley Cook of La Crosse; Tabor La Fallette of Colfax; J. W. Shepard of Lewiston; Howard Hughes of Pullman and A. J. Haile of Spokane. They met with Mr. Goodloe, executive vice president and general manager of the C.C.C. in Spokane on June 10. The com'te presented the opinion of the warehousemen.

The meeting adjourned with Mr. Goodloe making this statement: "As far as I know the program must go as it now is. At present I don't see any possibility of making a change." Thereupon Mr. Goodloe was informed once again that the warehousemen are unanimously opposed to this requirement of issuing "insured warehouse receipts."

Regulation of Itinerants

Legislation for the regulation of licensing and taxing of itinerant merchants has been proposed in 24 states. Thus far, only 3, Iowa, Montana, and Wyoming, have enacted these bills into law. Permits and distinctive license plates are required, and the license fees range from \$10 for each vehicle in Wyoming to \$100 in Montana. Surety bonds in amounts from \$250 to \$1000 must be posted, conditioned upon honest weights, accurate representations and the payment of checks. Iowa requires public liability and property damage insurance. Similar bills have passed both Houses in California and are in the Governor's hands.

Most of the proposed legislation has been subjected to extensive amendment, by the framers or in committee, in order to soften the original drastic restrictions. Even so, bills have failed in Arizona, Arkansas, Colorado, Indiana, Kansas, Michigan, Minnesota, Missouri, Nevada, New Mexico, North Dakota, Ohio, Oklahoma, South Dakota, Utah, and Illinois. They are pending in Wisconsin and Texas on last report. The Governor of New York vetoed a bill for the licensing of "merchant truckmen" dealing in agricultural products, imposing a \$2 fee and requiring bills of sale. Nebraska increased the fee from \$10 to \$25 by amendment.

The North Dakota Carrier Act was amended to include "agricultural carriers" (excepting producers hauling their own produce) with permit fee of \$25 and \$15 fee for each vehicle. Oregon and Washington adopted strict regulations covering the buying and selling of agricultural products. The Washington law provides for high fees and expensive insurance.

A Decade of St. Louis Mill Feed Futures

By W. J. KRINGS, Sec'y. St. Louis Merchants Exchange

While the feed manufacturer could purchase for future delivery, his supplies of grain needed in the marketing of his product, there remained the hazard of accumulating large stocks of mill feeds and products manufactured therefrom without a like guaranty against price decline for these feeds. Likewise, the miller had no means of figuring a hedged price on his offals when determining his returns on flour contracts. The feed mixer had another loophole to close up—that ever troublesome question of cancellation or rejection of orders for deferred delivery of his commercial product, as well as the procuring of wheat offals at the proper time and at a fixed price.

Mill Feed Futures Inaugurated.—After many years of this unprotected method of dealing in what is commonly called mill feed, the Merchants' Exchange recognized the need for the establishment of the same means of protection for the offal as had been devised for the protection of purchases of grain supplies, and decided upon the development of a futures market for mill feed. The market became a reality on June 10, 1929. Because it was an innovation—no other market in the world had up to that time ever attempted anything of its kind—failure was predicted and the market was criticised and discouraged by many, but the far-sighted pioneers who saw in this agency an instrument of usefulness and dependability worked hard to demonstrate the feasibility of such a venture.

The market today has proved its value—it is a success. It has become widely recognized as another important step in the field of feed merchandising, for prior to its establishment the feed industry was without a safe means of hedging mill feeds.

The methods of trading and delivery used in the beginning would today probably be considered crude, but we must remember that the activity was new. Questions arose from time to time that had not been considered when the original rules for trading were adopted, but as the market developed changes were made, and will continue to be made to meet the demands of the trade. In working out the rules governing this trading, it was thought best to establish rules as nearly applicable as possible to the customs and usages of the cash trade. This proved somewhat difficult as the activity was an entirely new undertaking, but eventually most of the differences were ironed out and, today, the St. Louis mill feed futures contracts are recognized as meeting all demands of the trade.

Chicago Basis of Trading Established.—Originally trading was established on a St. Louis basis only. However, because of the geographical location of St. Louis, some reluctance about trading in mill feed for St. Louis delivery became manifest by mills and mixed feed manufacturers located east, southwest, and northwest of this market. Accordingly, the Merchants' Exchange of St. Louis, in its desire to better serve all feed territories, under date of April 1, 1932, established trading in mill feed futures on a basis of delivery at Chicago. This contract had the immediate effect of broadening the mill feed futures trade to a considerable extent, and, as a consequence, the St. Louis mill feed futures market is now being utilized by buyers and sellers of mill feed from the Rocky Mountains to the Atlantic Coast and from Canada to the Gulf of Mexico.

The unit of trade is 100 tons; trading is also conducted in lesser quantities, in multiples of 25 tons, which are considered job lots. The

commission charge is 20c per ton per round of trade. Each calendar month is considered a trading month, but no contract may be made for longer ahead than six months. At the present time trading on the Merchants' Exchange of St. Louis is being conducted in gray shorts for St. Louis delivery, and bran and standard middlings for Chicago delivery. These commodities must conform to the definitions adopted by the Association of Feed Control Officials of the United States, so it will be readily perceived that the gray shorts, bran, and standard middlings deliverable on futures contracts are the same as those deliverable on cash contracts.

Application of Mill Feed Futures.—In this day and age of rapidly changing economic and trade conditions, safety first is more than ever before the universal desire. Very few mills would attempt to enter into a contract for a large volume of flour without protecting themselves on the purchase of a sufficient quantity of wheat. When offering flour, millers figure either on the basis at which they are able to purchase the cash wheat or on some wheat futures contract as a measure of protection. Is it not therefore sound reasoning for this miller at the same time to figure what price he will be able to procure for his offal? Surely, the only sound policy for the miller to follow when quoting his flour is to determine on what basis he will be able to sell his feed. The miller who bases his sales price on feed prices in the mill feed futures market is protected to the fullest extent; in the event the feed market advances, the miller has the opportunity of merchandising his cash feed and buying back his hedge. This method of operation is frequently followed to good advantage.

The mixed feed manufacturer, who may have a large supply of raw ingredients and finds his sales declining, can utilize the mill feed futures market to hedge his holdings. On the other hand, the manufacturer may have occasion to book orders for his finished feed over a period of several months. What better hedge or protective measure does he require than to purchase in the mill feed futures market the portion of mill feeds he will require to complete these orders? If he is later able to buy the cash feed to better advantage, he can sell out his futures contract; or, in the event his orders should be cancelled, he can sell out his futures contract without being compelled to pay for and accept any cash feed he might have purchased, and thus save interest, insurance, storage, merchandising cost, etc.

From the viewpoint of the jobber, it frequently happens that he has an opportunity to sell feed for deferred shipment but is unable to purchase his anticipated requirements as mills are unwilling to quote sufficiently far ahead. Under such circumstances, he has but to remember that the mill feed futures market is always there to serve him. He can purchase a futures contract and be assured that he will be able to fill his orders, as he can take delivery if he so desires. If in the meantime the jobber finds that he can purchase his cash feed to better advantage, he has merely to resell his futures contract. These examples represent only a few of the many ways in which the feed trade can utilize the facilities of the mill feed futures market to excellent advantage.

Safety of Contracts.—Probably one of the most important features of the market is its safety. Adequate safeguards are provided for

the protection of the trade. The market is executed under the constant supervision of the Commodity Exchange Administration. Trades are executed under the rules and regulations of the Merchants' Exchange of St. Louis, and are cleared through the St. Louis Commodity Clearing Corporation, which requires ample marginal deposits at all times. Differences in value which occur due to fluctuations in the market price must be paid to the Clearing Corporation at the close of each session, thus retaining the original margin intact at all times. This close regulation of mill feed futures trading has brought about an extremely satisfactory condition, as never in the ten years of its existence has there been a default in the completion of a St. Louis mill feed futures contract.

The St. Louis mill feed futures market has now proved its usefulness as a dependable means of protection against fluctuations in prices of feeds and is now accepted by the trade at large as vitally necessary to the successful operation of the business of buying, selling, and mixing wheat offals.

Dust Explosions

[Concluded from page 59.]

the wall are blown out by an explosion. Were adequate window area provided, it is likely that sufficient glass would be blown out to relieve the pressure and so prevent damage to the walls. In modern elevators, many builders have gone farther and are providing window sash which open automatically in event of explosion and relieve the pressure developed before damage to the building occurs.

Farm and labor agitators will have five days of speechmaking, Aug. 7 to 11, at the annual session of the American Institute of Co-Operation, University of Chicago campus. Chas. W. Holman, sec'y, is giving publicity to the payment to pools of the proceeds of processing taxes to be levied by Congress, the pools to subsidize exports by selling to exporters at a loss.

Amendments to U. S. Warehouse Act

H. R. 6958, introduced in the House by Representative Fulmer, provides that

May Sell for Charges.—Any warehouseman licensed under this Act may require the payment annually of all charges for services rendered and advances made. In the event the charges for which the warehouseman claims a lien should equal the value of the products, the warehouseman may sell such products in satisfaction of his lien after making written demand upon the owner or holder of the receipt and failure of such party to make payment within thirty days from such demand.

Exclusive Federal Jurisdiction.—Sec. 29. That in the discretion of the Secretary of Agriculture he is authorized to co-operate with state officials charged with the enforcement of state laws relating to warehouses, warehousemen, weighers, graders, inspectors, samplers, or classifiers; but the power, jurisdiction, and authority conferred upon the Secretary of Agriculture under this Act shall be exclusive with respect to all products stored in a warehouse licensed under this Act and to any person securing a license hereunder so long as said license remains in effect, notwithstanding that there may be a state law on warehousing or that some products stored in a licensed warehouse may not have started to move or may not ultimately move in interstate or foreign commerce.

Concealing Liens or Incumbrances.—Any person who shall negotiate or attempt to negotiate, whether for the purpose of securing a loan or effecting a sale, a warehouse receipt issued for products against which there are valid liens or encumbrances and who shall fail to indicate on said receipt as required by this Act and the regulations promulgated thereunder by the Secretary of Agriculture, any such lien or encumbrance, shall be deemed guilty of a misdemeanor and upon conviction thereof shall be required to make restitution to any aggrieved party, and be fined not more than \$1,000, or imprisoned not more than six months, or both, in the discretion of the court, and each repetition of such offense shall be deemed a new and separate offense.

Crop Reports

Reports on the acreage, condition and yield of grain and field seeds are always welcome.

Mt. Vernon, Ind.—The Posey County wheat crop as a whole is of poor quality and the average yield is about 12 bus. to the acre.—W. B. C.

Atkinson, Ill., July 21.—Oats are turning out about half of a normal crop, but are of good quality. Corn promises a crop 115 per cent of normal.—Robert Hall, Federal-North Iowa Grain Co.

Evansville, Ind.—The wheat harvest revealed rather severe damage caused by the excessive rainfall during the month of June in this section, according to C. E. Skiver, Purdue wheat specialist.—W. B. C.

Laura, Ill., July 19.—Ordinary oats are turning out a rather poor crop, but Columbia oats are good, coming in with test weights as high as 36 lbs. per bu.—D. N. Kuntz, mgr., Laura Farmers Co-operative Elevator Co.

Noblesville, Ind.—One of the best wheat yields of the season in central Indiana is claimed by Charles Sylvester, who has a farm in Hamilton County. His crop this year averaged 43 bus. of 59-lb. wheat to the acre.—W. B. C.

Berne, Ind.—The Hessian fly caused great damage to the Adams County wheat crop, according to L. E. Archbald, county agent. Many fields are yielding from five to ten bus. to the acre. Wheat sown early last fall suffered most, the county agent said, the fly doing little damage to the late sown wheat.—W. B. C.

Lexington, Neb., July 18.—We have had a hot week from 11th to 17th but with good rains east of us (we have not had any). The weather today is more comfortable with the temperature about 98. Our corn is suffering from lack of moisture, but not materially damaged as yet. Another hot wind would hurt a lot but a good rain tonight will carry us thru a critical period.—Bert Nelson.

Springfield, Ill., July 19.—Corn continued to make good to excellent progress generally. Considerable corn is tasselling, and a lesser amount is "shooting ears" and silking. Winter wheat is practically all harvested, and threshing is progressing well in most areas; about 60% has been threshed. Oat harvest is generally well along. Soy beans are generally fine, altho there are some localized reports of weediness.—E. W. Holcomb, Statistician, U. S. Dept. of Agri.

Washington, D. C., July 10.—The acreage of soybeans grown alone for all purposes in 1939 is estimated at 8,119,000 acres, largest ever planted in this country. The 1938 acreage was 6,858,000 acres, and the 10-year (1928-37) average is 4,246,000 acres. Of the increase of 1,261,000 acres, four-fifths is in the three states of Illinois, Indiana and Ohio. Moreover, within these states, the greatest increase is indicated to be in the sections where the highest percentage of the acreage is harvested for beans, and where hay prospects are good this year.—M. S. D. A.

Portland, Ore.—Within the past two weeks the Willamette Valley not only regained much of its early fine wheat prospects but it continued to show a most excellent oats crop and a barley expectation that was a notch or two at least above normal. Between the early excellent prospects and the near-harvest survey, there was a deep gulf of despair. In the eastern sectors of Oregon and Washington generally and in some places in Idaho, Jim Hill mustard has proved a big foe to wheat production in some of the generally favored territories. It came to full life after the arrival of the rains.—F. K. H.

Springfield, Illinois, July 18.—Combining of wheat is about over and is well advanced for oats in central and southern Illinois, though considerable threshing remains to be done. The yield per acre outlook is above average for all crops except oats and barley. Corn and soybean prospects continue good to excellent with development of these crops about two weeks ahead of usual. State soybean acreage planted for all purposes is estimated to be 2,542,000 acres or the largest on record. It is likely that around 68 per cent of this total will be harvested for beans.—A. J. Surratt, Sr. Agricultural Statistician.

Toronto, Ont.—Fall wheat in the Province of Ontario generally shows a good uniform stand and promises an average yield. Spring grains are in below average condition thruout Ontario due to lateness of seeding and a subsequent period of cool dry weather. Heavy rainfalls, which covered the province at the end of the month and during the first part of July, were beneficial and came in time to prevent considerable damage occurring over a fairly wide area of Central and Southern Ontario. There is quite a variation in the appearance of spring grain fields thruout the province and in most fields the grain is heading out quite short.—S. H. Symons, statistician, Ontario Dept. of Agri.

Minneapolis, Minn., July 18.—The figures released by the Crop Reporting Board show an increase in the prospective yield of winter wheat from the June 1 figures of about 3%. It will be remembered that the month of June was notable for its ample supply of moisture and cool temperatures, i. e., ideal filling weather. It is our experience that ideal filling weather results in a far greater increase in outturn than would be indicated by this 3% figure. If the present development continues for another month and with an increased acreage of hybrid corn, a crop of around 3 billion bus. would not be surprising, and believe the Government estimate of July 1 of 2,571,000,000 is much lower than it should be.—Cargill Crop Bulletin.

Decatur, Ill., July 22.—Combining of wheat has been completed, altho some threshing remains to be done. The state yield was above average, altho quality varies; this is especially true where harvest was delayed by frequent rains. Very little wheat for sale as a large percentage is going into store on government loans. Illinois corn condition and progress is most promising. Corn fields look like young forests, we never recall corn shooting so many ears. You find grains forming in the early fields, and by the last of next week it will not be difficult to find roasting ears. The corn crop this season was planted at the right time, under ideal conditions, and ever since growing conditions could not have been more favorable, which accounts for the excellent development of the crop—it is about two weeks ahead of normal. Illinois farm reserves of old corn are the largest on record, estimated at 192,398,000 bus. against the average of 68,135,000 bus. The previous high record on farms in Illinois for July 1st was 155,173,000 bus. in 1933.—Baldwin Elevator Co.

Winchester, Ind., July 22.—A lot more wheat has gone into government storage than we anticipated. Country elevator operators have been so hungry for business that at the tail end of the movement they are paying very little attention to the grade of the wheat. We tested wheat today that carried 18 per cent moisture and some dealer, I suppose, bought it as No. 2 red wheat. This combined wheat has been a very disturbing factor. The air for a week now has been charged with moisture, ground is very, very wet, hot sun on it seems to keep the wheat just as wet as the day it rained. This climate is not suitable to cut wheat or oats with combine. Oats are being cut with combines, they are loaded with moisture, probably a lot of them won't be fit for market. There won't be very many anyhow. In this part of the state they are not of extra quality, altho the yield is about twice what it was last year. We hear of some oats weighing 32 lbs., 31 lbs. and 30 lbs. Last year 24-lb. oats were the best obtainable.—Goodrich Bros. Co., P. E. Goodrich, Pres.

Great Falls, Mon., July 19.—Our spring wheat condition generally in the triangle has gone back a full 50 per cent. In some sections of the triangle would say that it has probably gone back as much as 75 per cent. What the final outcome will be, we, at the present time, would not even hazard a guess. It will probably be three weeks before there is any new spring wheat and until almost before harvest we are not going to make any predictions as to the size of the spring wheat crop in this section. Winter wheat presents another situation. We have taken in a little new winter wheat at one or two of our stations, but in as much as most of this is going into farm storage and so little of it has been cut, it is pretty hard to make any estimate as to yield. However, in a trip Sunday, July 16, we saw winter wheat which, barring damage by grasshoppers, would make about 20 to 35 bushels per acre. The fields we saw have not been damaged by the grasshopper hordes which are flying in from the eastern part of the state. Whether or not they will do any damage remains to be seen. We doubt very

much if they will seriously damage the winter wheat about to be combined, but we saw considerable winter wheat acreage which will not be ready for combining before at least two weeks. The eastern part of Montana is still in very good shape according to the reports we get and they expect to harvest one of the best crops in years.—Greely Elevator Co., By G. F. Greely.

Columbus, O., July 11.—The oats acreage in Ohio is still declining. The estimated acreage for harvest in 1939 is 1,092,000 acres compared with the 1938 acreage of 1,121,000. Prospective yields at present are not very promising and many fields are very poor. The indicated yield of 30.0 bus. for 1939 gives a production of 32,760,000 bus. This compares with a yield of 33.0 bus. and a production of 36,993,000 bus. in 1938. The estimated acreage of barley for harvest in 1939 is 42,000 acres or 50 per cent more than a year ago. The indicated production of 1,008,000 bus. in 1939 is 308,000 bus. larger than the crop of 1938. The large increase in the rye acreage for 1939 partly offsets the decrease in the wheat acreage for this year. The rye acreage for harvest in 1939 is estimated at 85,000 acres compared with 26,000 in 1938. The forecast for rye production is 1,190,000 bus. against an estimated production of 351,000 bus. in 1938. The 668,000 acres of soybeans in 1939 show a 50 per cent increase over the 445,000 acres planted for all purposes last year. No data upon the yield and utilization of soybeans are collected until later in the season.—Glen S. Ray, Sr. Agri. Statistician.

Protein Tests of New Crop Kansas Wheat

The U. S. Dept. of Agriculture and Kansas State College co-operating took samples from 644 fields in Kansas between June 10 and July 4.

The 1,334 samples showed a range in test weight from 49 to 62 lbs. a bu. averaging approximately 57 lbs. Protein content ranged from 9 to 19 per cent (13.5 per cent moisture basis) with a state average of approximately 14 per cent. The grain from 51 per cent of the fields in the state was classed as dark hard, 21 per cent as hard, 15 per cent as yellow hard, 12 per cent as soft and 1 per cent as mixed.

Following is a tabulation of test weights and protein for Kansas by crop reporting districts:

District	No. Fields	Wt. Aver.	% Protein— High Low Aver.
1 Northwestern	39	55.4	18 13 16.7
2 Northcentral	116	55.6*	19 9 14.2*
3 Northeastern	63	56.0	17 9 13.1
4 Westcentral	32	56.2	18 14 16.8
5 Central	136	56.5*	19 10 14.8*
6 Eastcentral	63	56.2	16 10 13.5
7 Southwestern	55	58.3	19 12 16.5
8 Southeastern	134	58.0*	18 9 13.0*
9 State	29	57.2	18 9 12.7
State	667	57.0*	19 9 14.0*

*In districts 2, 5 and 8, the average test weight and protein values are weighted according to the relative volume of wheat produced in the various counties. In the remaining six districts the average values are based on the number of samples tested. The average test weight and protein values for the state are weighted according to the relative volume of wheat produced in the various districts.

Yields from the fields sampled averaged low in districts 1, 4 and 7 and the western counties of districts 2 and 5. Protein ran highest in these areas.

The C.C.C. put out a \$200,000,000 note issue to the public July 24 to take up crop loans now held by banks. A bill is pending appropriating \$119,000,000 to pay losses on loans. Taxpayers will pay the bill.

Live stock men estimate that the corn belt will raise 7,760,000 fewer pigs this year, and the Southern states 5,080,000 more, indicating the shift due to regimentation of farmers by the Washington administration.

If crops maintain their present promise the total production of the Northern Hemisphere, excluding the U. S. S. R. and China, may reach 3,530,000,000 bushels, or about 10 per cent less than last year but still 11 per cent more than the average of 1933 to 1937.—International Institute of Agriculture.

Grain Movement

Reports on the movement of grain from farm to country elevator and movement from interior points are always welcome.

Duluth, Minn.—The first car of grain from the 1939 crop was received here July 20. It was a car of rye from Barney, N. Dak., consigned to Hallet & Carey Co., sold as sample grade, at 41c and tested 54 lbs.—F. G. C.

LaCrosse, Wash., July 20.—Wheat is moving rapidly into elevators and warehouses. Dealers report the test weight very satisfactory, and in line with the test weight of last year. The protein content of early samples has not shown as high a percentage as last year.—F. K. H.

Minneapolis, Minn.—The first carload of 1939 spring wheat arrived in Minneapolis July 18 from Jefferson, S. D. It was sold to the Pillsbury Flour Mills Co. for 76½c a bu., which was 6c over the September option. The wheat graded No. 2 dark northern spring, weighed 57 lbs. per bu. and tested 14.5 per cent protein and 13.4 per cent moisture.

Milwaukee, Wis.—The first carload of No. 1 malting barley of the new crop arrived in Milwaukee July 17 from South Dakota and was sold to the Froedtert Grain & Malting Co., Inc., for 46c a bus. A year ago, the same class of barley brought about 52c. The indicated crop of Wisconsin malting barley, as of July 1, was only 22,232,000 bus. as against 24,286,000 a year ago.—H. C. B.

Vancouver-New Westminster, B. C.—Receipts and shipments of grain during June as compared to June, 1938, expressed in bushels, 1938 in parentheses, are as follows: Receipts, wheat, 977,477 (15,947); oats, 314,111 (36,127); barley, 25,618 (65,062); shipments, wheat, 2,259,916 (122,841); oats, 248,613 (75,154); barley, 9,294 (408,660).—E. A. Ursell, Statistician, Board of Grain Commissioners for Canada.

Duluth, Minn.—Grain moving out of local elevators, and bound for eastern points via lake, or rail into central states territory has fallen off sharply this month, trade statistics show. The reason for this let up grain men explain is the lagging foreign and eastern home demand for grain. Last year was the best shipping season the trade had since 1928, with this year's movement running several million bus. behind altho receipts exceed a year ago by about 8,000,000 bus. Elevator stocks, July 20, this year, totaled 18,394,000 bus. against only 4,301,000 bus. at the same time in 1938. Every road at the Head-of-the-Lakes is stepping up activity in preparation for movement of the crop—expected to be on a par with better than average yields of other years.—F. G. C.

Portland, Ore.—Oregon-Washington wheat and flour shipments waterborne for the cereal year ending June 30 broke all records since 1927-28 according to Portland Merchants Exchange. Totalling 57,762,050 bus., the movement was 4,000,000 bus. greater than that of 1931-32 when the government subsidized extensive wheat and flour shipments to China, but dropped 17,000,000 bus. short of the 1927-28 record.—F. K. H.

Fort William, Ont., July 18.—During the month of June 11,759,979 bus. of Canadian wheat were disposed of, as compared with 5,438,789 bus. a year ago. Export clearances to overseas ports totaled 10,634,979 bus. compared to 5,352,739 bus. a year ago. For the eleven months of the crop year export clearances of wheat totaled 129,025,210 bus. as compared with 73,385,323 bus. during the like period a year ago.—E. A. Ursell, statistician, Board of Grain Commissioners for Canada.

New York, N. Y.—Receipts and shipments of grain during the month of June as compared to the same month a year ago, expressed in bushels, 1938 being in parentheses, follows: Receipts, wheat, 201,899 (111,900); corn, 740,785 (802,732); oats, 297,787 (63,250); rye, — (1,700); barley, 30,949 (—); millfeed, tons, 50 (17); shipments, wheat, 110,000 (214,000); corn, 8,000 (1,093,000); rye, — (46,000); clover seed, 56 (22); millfeed, tons, — (7).—Dept. of Information & Statistics Produce Exchange.

Ottawa, Ont., July 20.—Fort William elevators have been moving out grain since a large new crop seemed assured, to make more room. R. H. Coats, Dominion statistician, reports that the wheat stocks in elevators in Canada for the week ending July 14, 1939, were 92,048,611 bus. compared with 94,688,692 bus. for the preceding week and 22,645,957 bus. for the corresponding week last year. Stocks of wheat in Canadian elevators were located as follows: Western country elevators 12,360,000; interior terminals 11,336,054; Vancouver-New Westminster 7,298,011; Victoria 272,216; Churchill 2,213,380; Fort William and Port Arthur 16,080,236; Eastern elevators lake and seaboard ports 24,116,579 bus. and 8,656,759 bus. respectively.

Farmers to Be Fined \$2 for Not Planting a Home Garden

R. M. Evans, administrator of the A.A.A., reports that at the 3-day conference at Washington of A.A.A. com'itemen, it was recommended:

"That where state com'ites recommend, further encouragement be given the production of food in home gardens by providing a \$2 allowance for family gardens, and a DEDUCTION of \$2 per farm from payments otherwise earned if the farm family has not raised a home garden."

Washington News

A loan program for rye growers is being considered by Washington officials.

The House July 20 passed a bill providing for an investigation of the National Labor Relations Board.

Washington, D. C.—The \$2,490,000,000 lending bill now pending in Congress provides \$500,000,000 for rural electrification and \$600,000,000 to help farm tenants buy land.

S. 2395, the Wheeler bill, provides for payments to farmers of the difference between average farm prices and parity price, the funds to be raised by a system of "certificates" which processors would have to buy as they sold their products.

H. R. 6958, amending the U. S. Warehouse Act places too much power in the hands of the Secretary of Agriculture in the grading, weighing and warehousing of grain and would discriminate against state inspection and warehousing departments.

The House began July 24 consideration of proposed changes in the transportation bill, after two days of debate. The bill repeals land grant rates, authorizes the railroads to initiate consolidations, and places many inland waterways under the authority of the Interstate Commerce Commission.

E. C. Parker, who has been in charge of the grain division of the Bureau of Agricultural Economics since July, 1933, died July 21, following several weeks of illness. He was with the Minnesota Agricultural Experiment Station from 1905 to 1908, and since served the federal government in various capacities.

H. J. Res. 343, read twice in the Senate, on July 18 was referred to the Com'ite on Agriculture. It provides for a farm marketing quota equal to the sum of the normal or actual production, whichever is greater, of the farm acreage allotment, and the number of bushels on hand that could have been marketed a previous year without penalty.

The bill amending the social security act which has been passed by the House reduces the unemployment tax in states which have built up reserves, requires the employer to furnish the employee a statement showing the wages paid after Dec. 31, annually or quarterly, and makes the computation of taxable wages on the basis of payments rather than on the accrual basis, making both this tax and the old age insurance tax on the same basis.

Daily Closing Prices

The daily closing prices for wheat, corn, oats, barley, rye and soybeans for September delivery at the following markets for the past two weeks have been as follows:

Wheat													
	Option	Low	July 12	July 13	July 14	July 15	July 17	July 18	July 19	July 20	July 21	July 22	July 25
Chicago	79½	60%	66½	66%	66½	66½	66½	67	66½	64½	64%	63½	60½
Winnipeg*	68%	49%	54½	54½	54½	54½	54	54½	54½	52½	52%	51½	50½
Liverpool*	52	55½	55%	55%	55½	55½	54½	53½	53½	52½	52½	53	52½
Kansas City	75	55½	61%	61%	62½	62%	61%	62½	61%	59%	59%	58%	55½
Minneapolis	82½	63%	70%	70½	71½	70%	70½	70%	70%	67%	68½	66%	63%
Duluth, durum	73½	57%	62½	62%	63	63	62½	62½	61%	60%	61½	60	57%
Milwaukee	79½	60%	66%	66%	67	66%	66½	67½	66%	64%	64%	63½	60%
Corn													
Chicago	56½	38½	45%	45%	45½	45½	45½	44%	43%	41	40½	39%	38½
Kansas City	52½	36½	44%	44½	44	44½	44½	43%	42%	39½	39%	38½	36%
Milwaukee	56	45%	45%	45½	45½	45½	45%	45	43%	41½	40%	39%	38%
Oats													
Chicago	33%	24%	28%	28½	27%	27½	27½	27%	26½	26	25½	24%	24%
Winnipeg*	31½	23½	26%	25%	26	26	26½	26%	26%	25½	24%	23½	24
Minneapolis	30%	21%	25%	25%	24%	24½	24%	24%	24½	23½	22%	21%	21%
Milwaukee	33%	24%	28%	28½	27%	27½	27½	27%	26½	26%	25%	24%	24%
Rye													
Chicago	56½	39½	41%	41½	40%	41%	41½	42%	42%	40%	41½	40%	39½
Minneapolis	52½	37	38%	38	38%	38½	38½	39%	40%	38%	38½	37½	37½
Winnipeg*	50½	35%	38%	37	37½	37½	37%	38%	39%	37%	37%	36	36
Barley													
Minneapolis	40½	27½	32½	31½	31½	31½	30½	31½	31	30	29½	28½	27½
Winnipeg*	41½	31½	33%	32%	32%	32%	32%	34½	35	32%	33½	33	31%
Soybeans													
Chicago*	84%	66½	71	69%	68%	69%	70	70%	69%	69	68%	68%	66½

*October delivery.

1939 Flaxseed

Minneapolis, Minn., July 22—The average consumption of flaxseed during the last two years in this country has been 28,850,000 bus. When our domestic flax becomes the cheapest flax to work, then a 15,000,000 bushel crop is not large enough to take care of the demand. On such a basis, therefore, we saw renewed strength in our domestic market and weakness in Argentine prices.

We desire to call attention to the very drastic declines that have taken place in domestic linseed meal markets during the past six weeks. In attempting to reach a price at which meal made from new crop seed might be marketed, sellers have forced markets down from \$10 to \$12 per ton. With cottonseed and soybean meal very cheap and both considerably under linseed meal values, there is nothing to indicate that the decline in linseed meal has been completed.

The present U. S. flax crop cutting is extending over the southern areas of Minnesota and in Iowa and South Dakota. Reports reaching us today indicate yields from eight to thirteen bushels per acre on the fields cut. In the western and northern districts of the flax area, grasshoppers are plentiful. One elevator line reporter states that in his opinion "hoppers" will take a toll of about one-third of the flax crop. Weeds have also proved a menace this season. The weather this week has been fine in most of the flax growing areas.—Archer-Daniels-Midland Co.

Flour and Wheat Export Authority Continued

The Department of Agriculture has announced continuance of the wheat flour export program which was inaugurated Sept. 3, 1938, to encourage the sale of United States flour to foreign countries, the Philippine Islands or the Virgin Islands. Renewal of program operations, under authorization for the 1939-40 fiscal year was signed by the Secretary of Agriculture July 11.

Corn Control Simplified

Congress on July 17 and 18 approved legislation to postpone from Aug. 15 to Sept. 15 the date by which the secretary must determine whether or not a marketing quota for corn is necessary. Postpone from Sept. 10 to Oct. 10 the date on which he must announce results of corn referendum.

Any grower who complies with the A.A.A. requirements is to be permitted to sell all the corn he produces. Only those who do not comply will be prevented from selling part of their corn.

H. J. Res. 342 was read twice and referred to the Agriculture com'te, and provides that determinations under Sec. 322 of the A. A. Act may be proclaimed at any time prior to Sept. 22, and the result proclaimed any time prior to Oct. 10 and the marketing percentage shall be 100 per cent.

The Barden Wage and Hour Amendments

The bill just introduced by Representative Barden to amend the Wage and Hour Law has the support of the farm lobby.

The bill would permit the employment of persons employed in connection with or incidental to the grading or storage of grain at terminal markets, or handling or transportation in connection with or incidental to such operations, up to 56 hours a week without the payment of overtime. Furthermore, during a period or periods of not more than 14 work weeks in the aggregate in any calendar year, there will be no limitation on the number of hours which may be worked. In this connection a terminal market is defined to mean any urban center of more than 150,000 population where the grain is customarily stored before processing, or where it is customarily stored and the greater part thereof distributed to consumers within or adjacent to such urban centers.

Another section of the Barden bill completely exempts from both the wage and hour provisions of the law employees engaged in grading, hand-picking, cleaning or local storing (but not including terminal-market storage), of grains, or handling or transportation in connection with or incidental to such operations. The term "local storing" means that storage used outside of terminal markets as defined above.

Employees engaged in the grain handling and storing operations of mills located in cities of 150,000 population and over, therefore, will be permitted to work up to 56 hours a week without the payment of overtime, and during a period of 14 work weeks there will be no limitation of hours at all. Employees engaged in grain handling and storing operations of all other mills would be completely exempt from both the wage and hour provisions of the law.

Administrator Andrews opposes the bill as creating new discriminatory competitive situations.

Corn ground during June amounted to 5,412,732 bus., against 5,193,289 in June, 1938, as reported by the Corn Industries Research Foundation.

Service Is Speedy at Raber, Ind., Elevator

As modern as the younger generation, and well adapted to the community it serves, the new elevator of the Raber Cooperative Co., at Raber, Ind., is equipped to handle a diversified business in grain, live stock, farm machinery, fencing, feeds, seeds, coal, fertilizer and a multiplicity of other farm needs.

The new elevator, feed grinding and mixing plant, and warehouse is of cribbed construction, iron clad. It varies from standard elevator construction in that all bin walls are continued up to the roof, leaving plenty of room for the machinery at the top of the house, instead of having a cupola. The 30x60 foot foundation walls, 13 inches thick at the top, 20 inches thick at the bottom, continue downward 12 feet to make a full basement under the entire structure, with plenty of room around the boots, shellers, drags and grinder.

The elevator has five deep bins that hold 2,500 bushels each, three bins over the driveway that hold 1,000 bus. each, and seven bins that hold 250 bus. each, three of these being over the driveway, the other four over the workfloor. This gives the elevator total bulk grain storage capacity for 18,000 bus.

THE DRIVEWAY is between the grinding division and the elevator. It is 13½ feet wide, 14 feet high, and 40 feet long, including a 10 foot overshoot at one end to make room for running the truck lift out far enough to dump even the longest truck in any of the three pits.

Approaches to the driveway are of concrete, and the doors are of spring overhead type, easily operated by pulling a rope. Under the driveway are 2 grain pits that will hold 500 bus. of grain each, and a grinding pit that holds 300 bus. The ear corn pit and the grinding pit are each fitted with a drag, the small grain pit with a screw conveyor to feed grain into the proper boot.

THE EAR CORN leg has a combination 1,000 bushel sheller and boot. The rubber covered cup belt in it is 16 inches wide, and carries 15 inch buckets on 12 inch centers. The small grain leg as a standard boot, with a 14 inch belt, with 13x6 inch buckets on 12 inch centers.

Each of these grain legs is driven by a 5 h.p. geared reduction motor, transmitting its power to the head by roller chain and sprockets. The motors are set between the up and down legs, out of the way, yet readily accessible.

Machinery at the top of the house includes a large grain cleaner, an automatic shipping scale, a husk reel, and the customary turn-heads on the steel leg heads. Below the cleaner is a distributing floor, which consists essentially of a series of cat-walks over the open tops of the bins, and a distributor that takes grain from the cleaner and distributes it to the various bins.

THE FEED GRINDING and mixing division is separate from the elevator, although joined



Elevator and feed mill of Raber Co-operative Co., Raber, Indiana.

to the driveway and receiving grain from the grinding pit in the driveway. This department of the business is 30x22 feet, and houses all the feed machinery. In the basement is a hammer mill with direct connected, inclosed, self-ventilating motor, on the second floor is a scalper and a corn cracker and grader, on the work floor is the one-ton vertical feed mixer. This division has its own leg with combination sheller and boot, 11 inch belt and 10 inch buckets. The 600 bushel per hour capacity sheller is driven by 10 h.p. motor, and the leg is driven by a 3 h.p., inclosed motor with gear reduction. The feed grinding and mixing division of the plant has two small retail bins to accommodate customers who want small quantities of corn or oats, and three cracked corn bins to hold the three grades of cracked corn made by the corn cracker and grader, for retail sales. Four spouts bring cracked corn direct from the cracker and grader for sacking of custom work.

The hammer mill is served by two garner bins. One may be filled while the mill is grinding the contents of the other. This makes it possible to keep the hammer mill in constant operation on a continuous flow of grinding jobs, except for times that it must be stopped to change screens.

Three spouts from the meal collector are fitted with butterfly valves to divert ground product into an outside bulk service spout, into a sacking spout, or direct into the feed mixer. Concentrate ingredients are run into the feed mixer through a floor level hopper.

THE COB BIN and the dust house are attached to the west end of the elevator. The

hoppered bottom of each of these bins is high so that trucks can be backed underneath, to let gravity do the work of dropping their contents into vehicles. The Raber Co. worries little about cobs. Convenience in loading encourages farmers who use them for fuel, fertilizer or bedding to keep the bin clean.

Both the cob bin and the dust house are well ventilated with louvres at the top, and behind the louvres is quarter inch mesh screen, the same mesh of screen as protects the windows in the elevator from sparks and sparrows.

THE SEED AND WAREHOUSE division of the plant is 35 feet long, 24 feet wide. At one end of this one-story structure is the seed cleaner. The rest of the room is used to store fertilizer, feeds, seeds, and other retail stocks.

Even the most modern of elevators usually can stand improvement somewhere, so Manager Ralph Schinbeckler made an early improvement by installing a blower, metal trunking and sweeps for a complete dust collecting system to pull dust out of the boots, the automatic scale, the hammer mill, the scalper, and from the corn cracker and grader.

Manager Schinbeckler keeps water barrels and hand fire extinguishers at strategic points on every floor in his new elevator, but he went a step farther in fire protection, and in making working conditions pleasant for his employees by the installation of the dust collecting system. The system features dampers in each dust trunk to control the draft from machines or conveying equipment in operation.

The new elevator was designed and built by

Sidney Grain Machinery Co., which supplied all of the machinery. Bearing the Sidney name plate are the corn shellers, the boots, the heads, the power transmission machinery, steel spouting, the corn cracker and grader, the scalper, the feed mixer, the seed cleaner, and the husk reel. The shipping scale is a Richardson, the grain cleaner is an Eureka with Beuhler drive, the hammer mill is a Jay Bee No. 4. Head shafts turn on SKF self-aligning ball bearings. Master gear reduction motors drive the legs, master inclosed motors drive other machines through V belt drives, except for the 75 h.p. inclosed motor direct connected to the Jay Bee hammer mill.

IN ADDITION to the new elevator, feed plant, and warehouse, the Raber Cooperative Co. has several other buildings adjacent. These include a large warehouse for farm machinery, another warehouse for other farm supplies, a combination hardware store, grocery store and office, and gasoline and oil tanks. The elevator and the stockyards are on land leased from the Nickel Plate railroad, the other buildings on the company's own property.

The company annually ships about 30 carloads of wheat, corn and soybeans, sells 12 carloads of Wayne poultry, hog, and dairy feeds, and supplements, ships 70 carloads of livestock, does \$6,000 worth of business in groceries and hardware, \$3,000 worth in gasoline and oil, \$5,000 worth in seeds, sells \$1,000 worth of cement, handles nearly \$1,000 worth of twine, \$500 worth of salt, \$5,000 worth of fence, \$700 worth of tile, \$6,000 worth of fertilizer, \$8,000 worth of coal, \$9,000 worth of farm machinery, does \$5,000 worth of grinding and mixing, and provides a living for five employees. Ralph Schinbeckler has been manager of this thriving company for three years.

Report on Chicago Elevator Explosion

The dust explosion in Calumet grain elevator A in Chicago on May 11—which resulted in a loss of nine lives, destruction of five large grain elevators, injuries to 30 men and a property loss of about \$3,500,000—probably started with the ignition of grain dust at the bottom of one of the legs, according to an announcement by the U. S. Department of Agriculture. A careful investigation of the disaster has just been concluded by Dr. David J. Price and Hylton R. Brown of the Department's Chemical Engineering Research Division.

Long experience shows that fine dust in suspension, such as is commonly found around grain elevators, is highly explosive, needing only a spark or flame to touch it off.

Regulations prohibiting application of suction before weighing grain entering the elevator, in the opinion of the engineers, prevent the elevator operator from providing adequate protection. Foreign material in the grain received at an elevator is frequently of the type which may produce sparks if it enters the grain-handling machinery. The engineers believe some system should be developed whereby dust might be removed during the handling of grain, with supervision to prevent any operating abuses which may affect grain weights.

In Swift & Co.'s appeal from an order by the Sec'y of Agriculture under the Packer and Stockyards Act to desist from discriminating in price discounts to buyers of products the U. S. Circuit Court held that the Sec'y of Agriculture was "not authorized to put an end to fair and honest competition between those who are under no legal disability to compete." Under the evidence the court found that Swift had to grant the discounts and 30 days' credit or lose the business to other purveyors. The court held Swift had only met competition in granting price differentials.



Manager Ralph Schinbeckler of the Raber Co-operative Co., Raber, Ind., examines ear corn just brought in by the company's truck.

Price Fixing a "Silly Gesture"

Premier Mitchell Hepburn at St. Thomas, Ont., July 17 said:

"After careful consideration, the action of the Dominion government in fixing the price of eastern wheat at 70 cents a bushel appeals to me as a silly gesture that will be of little benefit to Ontario farmers.

"It will mean that the Dominion government will go further into debt carrying out this subsidization plan. The Dominion government is preparing to buy wheat and ship it to Montreal for export when there is no export market for Canadian wheat.

"The government will have all the wheat down there in storage and won't be able to sell it."

Fat Acidity in Relation to Heating of Corn in Storage

[Abstract of paper presented at the 25th Annual Meeting of the American Association of Cereal Chemists.]

By LAWRENCE ZELENY, Assoc. Grain Technologist, Agricultural Marketing Service U. S. Department of Agriculture.

Studies of the heating of corn in experimental storage show that the moisture content is not the only factor determining the rate at which corn will heat under carefully controlled storage conditions. Different samples having the same moisture content often show quite different tendencies to heat. The results are in accord with experience in commercial storage of corn.

Obviously, the discovery of some factor other than moisture content which influences the storage behavior of different lots of corn stored under the same conditions might prove to be of considerable commercial importance. It has been observed frequently that corn containing damaged kernels is more likely to heat in storage than is sound corn of the same moisture content, but reliable methods for measuring the degree of such soundness or unsoundness have been lacking. The "fat acidity" method recently proposed by Zeleny and Coleman (U. S. Dept. of Agr. Tech. Bull. No. 644) for determining the degree of soundness in corn was therefore applied to 122 samples used in experimental storage tests.

Corn samples that heated more rapidly than would be expected from their moisture content almost invariably showed high fat acidity values, and, conversely, samples that heated more slowly than would be expected almost always had low fat acidity values. Analysis of the data obtained showed that for the series of corn samples under investigation the rate of spontaneous heating under the experimental storage conditions used could be predicted with more than twice the accuracy when both moisture and fat acidity values were considered than when moisture content was considered alone.

Since the fat acidity determination is a chemical test sufficiently simple and rapid for routine work, it may prove to be useful as a practical test for storage value of commercial corn. It is reasonable to expect that relationships between moisture content, fat acidity values, and rates of heating, analogous to those found in these experimental studies, should hold for commercially stored corn. It also is probable that experience in commercial storage will indicate that corn of low acidity may be stored safely with higher moisture content than corn similar in appearance but having high fat acidity. The laboratory experiments showed that low acidity corn containing more moisture than is commonly considered safe for commercial storage did not spoil in experimental storage, while other corn of high acidity, and commonly considered as safe for storage from both an appearance and moisture content basis, did spoil. Safe fat acidity limits for the commercial storage of corn at different moisture levels can not be

determined solely by laboratory experimentation but only through the extensive practical application of the fat acidity test to corn in storage and the observation of its relationship to storage behavior.

It is anticipated that such data will be accumulated through the cooperation of interested commercial laboratories, and that this cooperative effort may lead eventually to the establishment of useful fat acidity limits at different moisture levels for the safe commercial storage of corn and possibly the other cereal grains.

Grading Grain by Width of Kernels

For many uses it is so important to have the kernels of grain of a uniform size that buyers gladly pay a premium for samples presenting that attractive appearance.

The machine shown in the engraving herewith was designed to separate efficiently by width or thickness barley, rye, wheat or oats. The machine may be furnished with various size perforated slotted hole screens for removing the undersize barley from malting barley, grading barley by width for malting purposes, removing thin wheat from plump wheat and thin oats from plump oats, at the unusually large capacity of 400 bushels per hour and up.

Slotted steel screens are arranged in a staggered manner over which the barley falls by gravity. As the grain moves from one screen to the next, the undersize barley, which passes thru the screen is diverted and spouted separately from the plump grain which flows over all the screens and is discharged below.

These width graders are available in various sizes having 10, 12 and 14 screens. The 10-screen size may be furnished with scalper and aspirator so that the grain can be taken direct from the cars or truck to the separator without first having to go over a rough cleaner.

Cleaning racks operate under each screen which keep them clean and positively prevent plugging. The new and improved drive mechanism for the cleaning racks is so carefully

balanced that a 3/4-h.p. motor will operate the 10-screen grader without scalper and aspirator.

Using fewer moving parts than the earlier design, the mechanism is so ruggedly constructed that it will give years of uninterrupted service. The usefulness of the machine is greatly increased by the fact that screens can be rapidly changed to meet the grading requirements of various grains.

The machine is known as the Superior Width Grader and its profitable performance is bringing it into general use in the barley territory of Southern Minnesota and Iowa. The large capacity and extreme accuracy of this machine has made it a favorite in the terminal markets handling malting barley. Readers of the Journals may obtain additional information on application to the builders, the Superior Separator Co.

Corrosion of Concrete Bins

It is suspected that wet grain turning sour in the bin may generate acids causing the concrete wall to crumble and decay prematurely.

Experiment station scientists have discovered that the concrete silos on the farm are corroded by the silage acids.

A process has recently been discovered for testing the acid-resisting ability of concretes and mortars used in silo construction, by workers in the agricultural engineering division, University Farm, St. Paul.

The process shows clearly that concrete and mortars used in silo construction vary considerably in their ability to resist the corrosive action of silage.

As a result of findings in these tests, the University Agricultural Engineering Division is now recommending that specifications for concrete silo staves should require a transverse strength of 140 pounds per inch of width in place of the present 90 pounds formerly thought to be adequate.

Factors that are responsible for determining the ability of concrete stave silos to resist the effects of acid are: the percentage of cement used in the concrete mixture, the grading of aggregate, the quantity of mixing water, and the method by which the mixture is molded into slabs or staves.

From Abroad

The British farmer is guaranteed \$1.20 per bushel for his wheat.

The British Government will take advantage of low prices to increase its wheat reserve, according to Broomhall.

A 1939 world wheat production of 1,640,000,000 bus. was forecast July 10 by the International Institute of Agriculture. Last year's bumper production was 1,841,001,000 bus.

Failure of distribution under government control has led the Soviet to license tens of thousands of small traders, artisans and manufacturers to engage openly in private enterprise.

London, Eng.—At the international wheat conference the four large wheat exporting countries, Canada, Argentina, Australia and the United States, have so far failed to come to an agreement.

The heavy loss being taken by the Argentine government in selling wheat for export at 10 cents less per bushel than paid the growers is imperiling the elevator construction program to be paid for out of the profits of exchange control, now being diverted to farm aid.

A permanent grain exhibit has been established by the Argentine government in the building of the Argentine Rural Society, Buenos Aires. It contains a model of an elevator, numerous glass bins containing types of Argentine wheat, and large show cases containing samples of very many varieties of wheat plants. The exhibit was prepared by the National Grain & Elevator Commission.



Machine Grading Grain by Width.

Grain and Feed Trade News

Reports of new elevators, feed mills, improvements; changes in firms; fires, casualties, accidents and deaths are solicited.

ARKANSAS

Little Rock, Ark.—An order dismissing the complaint of the Arkansas Rice Growers Co-operative Ass'n against the Rice Mill Workers Union No. 20002 and a temporary restraining order against the union was issued in Federal Court July 14 by Federal Judge Lemley.—J. H. G.

CALIFORNIA

Salinas, Calif.—The Plant Food Corp., specializing in dairy feed, poultry and stock remedies, has opened for business.

Van Nuys, Calif.—Fernando Valley Milling & Supply Co. is installing two new Hall Signaling Grain Distributors in its new plant.

San Francisco, Cal.—California's grain and feed industry will gain recognition July 27 in its first radio salute when radio station KSFO will pay tribute to the men behind the grain and feed industry in the station's regular program, "A Salute to Industry." Walter Guild conducts the program which is broadcast with the co-operation of the California State Chamber of Commerce. Appearing on the program are E. R. Warren, Warren-Enos Co., wholesale grain dealer; and R. J. Smith of Anderson-Smith Milling Co., both of San Francisco and both past presidents of the California Hay, Grain & Feed Dealers Ass'n.

CANADA

Grand Valley, Ont.—The J. E. McIntyre grain elevator was destroyed by fire kindled by lightning on June 30.

Port Colborne, Ont.—The Robin Hood Milling Co. will build a \$1,000,000 plant here to manufacture cereals and provide for grain storage.—J. E. T.

Fort William, Ont.—Frank Ryder is recovering at the McKellar Hospital from injuries received recently when he fell on a moving belt at the Union elevator.

Toronto, Ont.—The Canadian Wheat Board has opened an office in the Star Bldg. in charge of Lorne S. Johnston, formerly manager for Smith, Murphy & Co., and prior to that local manager for the Canadian Co-operative Wheat Producers, Ltd. J. Gordon Burt, of Listowel, Ont., for a number of years manager of Hay Bros., Ltd., Ontario grain company, has been appointed manager in charge of country operations for the eastern division of the board.

Fort Erie, Ont.—A contract has been let for a cereal and feed mill to be constructed here. This is believed to be part of the planned activities of the Fort Erie Elvtr. & Terminal Co. Several years ago this company obtained an option on land at Fort Erie. Original intention of the company was to construct a grain elevator. Since removal of the special British tariff item on Canadian grain stored in U. S. elevators, it was generally felt the proposal had been abandoned.—G. E. T.

Ottawa, Ont.—Canada on July 14 established a minimum price of 70c a bu. for No. 1 eastern wheat of the 1939 crop, delivered at Montreal, the same price as for western wheat delivered at Fort William. The cabinet approved recommendation of the Canadian wheat board that a price of 70c a bu., basis delivered at Montreal, be paid for No. 1 Canada Eastern White wheat, No. 1 Canada Eastern Red Winter, and No. 1 Canada Eastern mixed Winter wheat. This price applies to the 1939 crop and becomes effective from Aug. 1, 1939, to June 30, 1940. Initial fixed prices to be paid for No. 2 and No. 3 grades of Eastern Canada winter wheat marketed through the Canadian wheat board will be set forth "within a few days," it was announced July 14 by the board's eastern division headquarters here. The board is setting up the price equivalents for No. 2 and No. 3 grades in the same varieties as No. 1.

Fort William, Ont.—Improved dust-elimination facilities in local grain elevators are asked by employees in negotiations leading to a new agreement with elevator operators to replace the one which will expire on July 31. The men also ask general increase in wages and other changes in working conditions. A preliminary meeting held here July 11 and 12 was adjourned to be resumed later, probably at Winnipeg.

Winnipeg, Man.—James Richardson & Sons announce that the presidency of the company left vacant by the death of James A. Richardson has been taken over by Mrs. Richardson. John B. Richardson was appointed vice-pres.; G. W. Hutchins, assistant to the pres.; C. A. Campbell, sec'y-treas. Presidency of the Pioneer Grain Co. will be filled by W. McG. Rait, while Henry Gauer will take over the presidency of the Eastern Terminal Elvtr. Co. Both these companies are subsidiaries of James Richardson & Sons.

Fort William, Ont.—John Alexander MacKay, prominent resident, died July 17 in Christie St. Military Hospital, Toronto. Until his recent illness he was employed at Grain Growers Elevator "B" for the last three years. Prior to that he had been superintendent of the Harbor Commission elevator No. 2 at Vancouver for several years. As a young man he was employed at C. P. R. elevator "B" until he enlisted for overseas' service in the Great War in 1915. In 1916 he was wounded and taken prisoner, his leg was amputated in Germany and since that time he had suffered greatly from his war wounds. Three weeks before his death he had undergone an operation at the hospital. Returning to Fort William in 1917 after having been returned to England from Germany in an exchange of prisoners, he was again employed in the grain elevator business, working in Grain Growers elevator "B" until going to Vancouver in 1925.

COLORADO

Manila (Watkins p. o.), Colo.—The elevator recently purchased by C. E. Williams has been repaired by W. H. Cramer and is in full operation.

Byers, Colo.—The new grain elevator has been completed for the Farmers Grain & Bean Ass'n by W. H. Cramer. The structure is attached to the company's bean plant.

Berthoud, Colo.—The Farmers Grain & Bean Ass'n with headquarters at Denver leased the Berthoud Elevator which it now is operating. Frank M. Waggener, who has been manager of the elevator for the last several years, is likely to remain with the new company.

Granada, Colo.—The Colorado Milling & Elvtr. Co.'s local plant burned early July 6. In addition to the elevator a considerable amount of new and old wheat was destroyed along with a warehouse containing 250 tons of coal and a general line of feeds. It is believed the fire started in the motor room and that defective wiring was responsible.

Lamar, Colo.—Ralph S. Baird, Greeley, an employe of the Colorado Milling & Elvtr. Co. for the last 21 years, will succeed the late Charles Maxwell as manager of the company's Lamar unit. J. S. Maxwell, who has been serving as acting manager since the death of his father, Oct. 24, 1938, will continue in his present capacity as assistant manager.

ILLINOIS

Mt. Pulaski, Ill.—C. G. Lindsay is new manager of the Mt. Pulaski Farmers Elvtr.

Rardin, Ill.—A. L. Hardin has sold his elevator to Paul E. Wyeth who is operating it.

Thawville, Ill.—The J. A. Bridson elevator has been repaired and remodeled and is in full operation again.

Cambridge, Ill.—The Wm. Ringle Co. installed a Kelly Duplex Corn Cutter and Grader with motor drive.

Towanda, Ill.—The C. E. Roseman Grain Elvtr. has installed a new Fairbanks type R Auto Truck Scale.

Paw Paw, Ill.—Vernon Merriman sold his interests in the Acme Feed & Poultry business to the Rochelle Co.

LeRoy, Ill.—Hasenwinkle-Scholer Grain Co. has installed a new Richardson Automatic Scale in its local elevator.

O'Fallon, Ill.—John Keck, 89, employed at the Tiedemann Flour Mills, Inc., for many years, died July 8 after a three months' illness.

Libertyville, Ill.—G. G. Hoskins, manager of Foulds Milling Co., for many years, recently resigned and has been succeeded by W. E. Roys.

Greenview, Ill.—W. F. Allison & Son have a new Fairbanks type R Auto Truck Scale at their elevator, with latest type concrete platform.

Walnut, Ill.—The Walnut Grain Co. has completed installation of a new 20-ton Soweigh Scale, equipped with a special beam, of 61,000 lbs. capacity.

Pleasant Plains, Ill.—F. W. Hagen, manager of the Hagen Grain & Milling Co., who has served as a village board trustee for two years, resigned, effective at once.

Cambridge, Ill.—William S. Johnston, 72, retired grain dealer and farmer, ended his life July 15 by slashing his throat with a butcher knife in the garage at his home.

Sparta, Ill.—H. C. Cole Milling Co. is using the old Jones elevator on Jackson St., placed in operation for temporary use, pending completion of the company's new elevator this month.

Oquawka, Ill.—Wayne Bros. have been receiving large quantities of grain at their elevator from the Iowa side of the river by ferryboat, which is operated by Carl Wayne and his son, Charles.

Bloomington, Ill.—Herbert J. Moore, of Herbert J. Moore & Co., is in the St. Joseph hospital, suffering from a re-occurrence of the malady that laid him up last winter. He is recovering rapidly.

Forrest, Ill.—M. H. Wallace, 46 years old, grain dealer and World War veteran, was killed the night of July 22 when his auto skidded on a gravel road and turned over into a ditch near Fairbury, Ill.

Macomb, Ill.—The Macomb Farmers Grain, Fuel & Supply Co., managed by H. L. Mum-mert, has had a new Kewanee Overhead, traveling Truck Lift installed in the driveway of its 25,000-bu. cribbed elevator.

Springfield, Ill.—Installation of another Anderson Expeller and a Drier, will bring the battery of these machines to five in the plant of the Illinois Soy Products Co., Newell Const. & Mchy. Co. has the contract.

Peoria, Ill.—The barley and malt storage addition being built at the local plant of the Pabst Brewing Co. by James Stewart Corp. consists of four concrete tanks, 118 ft. high and 22½ ft. in diameter, and two interstice bins.

Bridgeport, Ill.—M. J. Fitzgerald has opened the Lewis elevator on Main street and the B. & O. Railway. He is buying grain for Igleheart Bros. of Evansville. The elevator has been renovated and cleaned by the new management.—W. B. C.

Culver (Athens p. o.), Ill.—The Culver Farmers Co-operative Co. of Indian Point, nine miles east of Petersburg, has completed remodeling its elevator, increasing the storage capacity of its elevator to 15,000 bus. Modern grinding machinery has been installed.

LaFayette, Ill.—The elevator and lumber yard of LaFayette Co-operative Elvtr. Co., which is managed by William Wilkins, are being improved with a new coat of paint.

Galesburg, Ill.—Contract for installation of another Anderson Duo Expeller and an Anderson Drier has been let to Newell Constr. & Mch. Co. by the Galesburg Soy Products Co., headed by Max Alberts, to bring this company's battery of expellers to four.

Lanark, Ill.—The Lanark Farmers Co-operative Ass'n has replaced all of its weighing equipment with new Howe Scales, purchasing one 20-ton, 34 x 9 ft. and one 10-ton, 18 x 9 ft. The E. E. Johnson Feed Mill also has installed a 10-ton Howe Scale, 18 x 9 ft.

Ursa, Ill.—The Ursa Farmers Co-operative Co., which is managed by A. M. Woodruff and operates 40,000 bus. of storage space in two connected elevators, has installed a 30-ton Fairbanks Dial Scale with Printomatic attachment, and a 34x10 ft. concrete scale deck.

Ashland, Ill.—Charles Edwards, 57, living near here, died July 12 at St. John's Hospital, Springfield, of injuries sustained July 6 in a fall at the Ashland elevator, when he sustained a fractured vertebra and injury to the spinal cord. Mr. Edwards had been employed at the elevator for two years.

New Douglas, Ill.—Charles A. Prange and Walter W. Prange have purchased from the heirs of August F. Prange the controlling interest in the Prange Milling Co. The new owners plan to reopen the mill, the elevator portion of the enterprise having been the only active branch for several years.

Roseville, Ill.—The Farmers Grain Co., managed by Oscar Merkle, has under construction an 18 x 20 ft. addition to its office, which will make a private office available to the manager, make room for a large fire-proof vault, and provide a furnace room. The present office will become one large customers' room.

Decatur, Ill.—Machinery being installed in the newly organized Decatur Soy Products Co. plant by Newell Const. & Mch. Co. includes four Anderson Duo Expellers, and four Anderson Driers, an Ellis Cooler, a Perrin Filter Press, a B. & L. Roller Mill, a Kewanee 150 h.p. Boiler, a Jacobson Hammermill with 60-h.p. direct connected motor, a Newell truck dump and a corn crusher. A one-story frame 56 x 70 ft. warehouse is being built for the company by Boggess Const. Co. The company has been granted authorization to issue \$25,000 capital in Illinois.

Champaign, Ill.—Harry R. Sawyer and R. E. Rising recently formed a grain brokerage company which is being operated under the firm name of Sawyer & Rising. Mr. Sawyer, who for many years was connected with the grain commission firm of J. H. Dole & Co., recently was elected a member of the Chicago Board of Trade. Mr. Rising was manager of the Daniel F. Rice & Co. office in Champaign until the formation of the present above new partnership. Sawyer & Rising will continue the Daniel F. Rice & Co. private wire in their Champaign office and will work with that company under a participating agreement.

Quincy, Ill.—Quincy Soy Bean Products Co. is the name of a new company headed by Alex Sinaiko and Irving Rosen, who have taken over the plant formerly operated by the defunct National Mills, and are having it renovated by Newell Construction & Machinery Co. for operation this fall. Old machinery, including filters, a roller mill, and several legs and conveyors, are being reset and realigned for economical operation. One new Anderson Duo Expeller is being installed to bring the plant's battery of expellers to four. Anderson Driers and an Ellis Cooler, a new truck scale, and a Newell Truck Dump, and 22 Baldor Glass Insulated Motors are among the items of new machinery. When completed the plant will have a capacity for storing 150,000 bus. of soybeans, to keep its 2,000 bus. processing capacity per day busy.

Carthage, Ill.—The Carthage Elvtr. Co., operated by Loren Gelhaar and his son Howard, has built an 18 x 24 ft. frame feed mill building behind its office, and installed there a Blue Streak Hammer Mill with 15-h.p. motor, and a Blue Streak Corn Cutter and Grader. Grain for grinding is blown to garner bins above the grinder with an Invincible Grain Blower. Ear corn is shoveled into a receiving bin. Installation of a feed mixer is contemplated for the future.

Quincy, Ill.—The Missouri-Illinois Grain Co.'s frame, iron-clad barge loading station under construction on the bank of the river a few feet from the river channel, by Eikenberry Construction Co., consists of a 36 x 27 ft. building 24 ft. high, incorporating a 36 x 14 ft. driveway, an office, a 2,000-bu. leg, a Western Shaker Feeder under a 12 ft. pit, and a Western Gyration Corn Cleaner. A 12 inch Webster Screw Conveyor at workfloor level connects this receiving structure with an 8 x 8 ft. cribbed loading tower 61 ft. high, which has another 2,000-bu. leg to elevate grain to the 8 inch barge loading spout. A 20 ton truck scale and a Webster Overhead Truck Lift are being installed in the driveway. Provision is being made for later installation of an automatic shipping scale and a corn sheller. The plant was designed by Harry Surface. Missouri-Illinois Grain Co. is a new organization headed by Frank Shepherd of Louisiana, Mo.

CHICAGO NOTES

Clarence C. Hobson, for 17 years a member of the Board of Trade, with K. A. Scott & Co., died July 19.

The inquest into the eight deaths at the Calumet elevator explosion and fire of May 11 has been postponed until Sept. 26 by the coroner.

A city ordinance has been drafted to ratproof all buildings in which foodstuffs are stored. Basement floors must be of ratproof material, and rats must be prevented from going from one floor to another, by closing all openings with cement or impervious material.

Work on the new million bushel concrete elevator of the Glidden Co. has been started by the Macdonald Engineering Co., and it is expected to be ready to store soybeans by the time the new crop moves to market. Beans will be elevated by one 12,000 and one 4,000 bu. leg.

INDIANA

Fortville, Ind.—The McCordsville Grain Co. has been dissolved.

New Salem, Ind.—The New Salem Elvtr. recently installed a Blue Streak Hammermill.

Versailles, Ind.—The Versailles Feed Co. has installed a Blue Streak Hammermill complete with magnetic separator.

Wheatfield, Ind.—The George Stembel elevator and office have been painted with aluminum and made very attractive.—A. E. L.

Odon, Ind.—The Odon Milling Co. has installed new modern mixing equipment. The company is celebrating its golden anniversary.

Hoagland, Ind.—The Farmers Co-op. Co. recently purchased a revolving screen cleaner and large elevator from the Sidney Grain Machry. Co.

Summittville, Ind.—The Hinshaw Grain Co. has just completed an entire new power wiring job and installation of direct drive motors.—A. E. L.

Delphi, Ind.—The C. M. Kerlin Elevator was the scene of a smoldering dust fire July 8. The blaze was extinguished without much damage resulting.

Moran, Ind.—The elevator owned by James Stephenson & Sons was burned the night of July 16 together with its contents of grain and machinery. The office and coal sheds escaped the fire. The company operates elevators in Rossville, Sedalia and Moran, the latter house being in charge of Russell Stephenson.

Portland, Ind.—Finch & Weisel have dissolved the partnership made a few years ago. Each business will be conducted individually and under separate ownership.—A. E. L.

Arcola, Ind.—The Mayer Grain Co. has purchased a Reeves Variable Speed Drive and Crusher from the Sidney Grain Machry. Co. for its plants here and at Churubusco.

Mt. Vernon, Ind.—A modern Rockwood sprinkler system with 580 sprinkler heads located throughout the plant is being installed by the Fuhrer-Ford Milling Co.—W. B. C.

LaFontaine, Ind.—Beginning Aug. 1 the A. B. Martin and Farmers Co-operative elevators will close on Saturday afternoons at 4 p.m. An exception may be made, however, at harvest times.

Monterey, Ind.—The Farmers Co-operative Elvtr. Co. has installed a 20-ton 34 x 10 ft. Howe Truck Scale. A 15 h.p. motor recently burned out in the cupola, caused by lightning surge on power wires.—A. E. L.

Bunker Hill, Ind.—Fire of an undetermined origin on July 13 damaged the driveway of the Farmers Elvtr. & Lumber Co. The grain elevator was scorched, but not seriously burned. Property will be rebuilt.—W. B. C.

Mt. Vernon, Ind.—John H. Browning, employed by the Mt. Vernon Milling Co. in New Haven, Ill., for a number of years, has been placed in charge of the cribs at the local mills and will move his family here.—W. B. C.

Boonville, Ind.—The Boonville Mills, managed by Otto C. Roller, have completed two new concrete storage tanks. The company now has a storage capacity of over 35,000 bus. Two more new tanks will be built later in the year.—W. B. C.

Rolling Prairie, Ind.—The new 24 x 40 ft. office of the Rolling Prairie Lumber & Grain Co. is completed. The building is exceptionally well built with full basement, furnace, with air-conditioning; two lavatories with hot and cold running water, and indirect lighting.—A. E. L.

South Bend, Ind.—G. A. Birkey of Bremen has taken over the Vitality Feed Store here. He will continue the business along with the operation of his plant at Bremen, placing a manager in charge of the local store. The store will serve as another outlet for his Bremen mill products.

Modoc, Ind.—William E. Stock, 53, died at 4:50 p. m. July 7, in an ambulance in which he was being rushed to a Muncie hospital after he had shot himself thru the right temple with a revolver about 20 minutes earlier in the office of the Modoc Rolling Mills, which he operated. A note indicating despondency over ill health was found on Mr. Stock's body.

Romney, Ind.—Reconstruction work on the Romney grain elevator owned by W. R. Owens, burned April 30, received a setback July 6 when lightning struck the structure. The northwest corner was torn out by the bolt during a severe electrical storm early in the morning. No fire followed the bolt. The elevator, near completion, may be opened temporarily this month.

Colburn, Ind.—Fire destroyed the Ward A. Ostrander grain elevator about 7:15 p. m. July 3, in one hour's fierce burning while citizens formed a bucket brigade and fought fiercely to save homes of the 300 inhabitants of the town. The elevator has been used for storage purposes only the last five years. It contained no grain at the time of the fire.

Indianapolis, Ind.—G. A. Pritchard of the Indianapolis Grain Co., Inc., formation of which was reported in the last issue of the Journals, corrects the misstatement that he had been president of the Grain & Feed Dealers National Ass'n. Mr. Pritchard was president of the Indiana Grain Dealers Ass'n 1935-'36, and a director of both Indiana and the National Ass'ns in 1937-'38.

Dunkirk, Ind.—The Anderson & Morgan 30,000-bu. grain elevator was swept by fire the afternoon of July 12 and, with the building, a quantity of new wheat, some corn, oats and straw burned. A carload of grain had been shipped out just one hour before the fire, which is believed to have started in a bin from an overheated motor. The plant was in operation at the time, but the employees did not discover the fire until considerable headway had been gained by the flames. C. C. Anderson and C. F. Morgan were owners and operators of the elevator.

STRATTON GRAIN CO.

MILWAUKEE, WIS.

CHICAGO, ILL.

SPRINGFIELD, O.

ST. JOSEPH, MO.

NEW YORK, N. Y.

MILL FEEDS — FEED PRODUCTS — BY-PRODUCTS

Consignments and Future Orders Solicited

Richland, Ind.—Owen Causey, miller at the Fuhrer-Ford Milling Co., Mt. Vernon, recently resigned his position to become operating manager of the Lake Milling Co. plant.—W. B. C.

IOWA

Belmond, Ia.—The Farmers Grain Co. has installed a new 20-ton scale.

Dunkerton, Ia.—A 20-ton Howe Scale with platform 24 x 9 ft. has been purchased by A. G. Agnew.

Pulaski, Ia.—Forrest Grant, 41, grain dealer, was found dead in bed, July 18, by his wife.—L. A. G.

Hamburg, Ia.—The Good Seed & Grain Co. recently installed a new 20-ton scale with 34 ft. platform.

Riverside, Ia.—The Piper Grain & Milling Co. is remodeling its feed room for better handling and mixing.

LeMars, Ia.—The Hartog Elvtr. Co.'s office was broken into July 15, the safe broken open and \$75 stolen.

Sioux City, Ia.—Thomas J. Kelly, manager of the International Milling Co., has moved his family here from Buffalo, N. Y.

Zaneta (Hudson p. o.), Ia.—A complete new foundation has been constructed under the Piper Grain & Milling Co.'s plant.

St. Charles, Ia.—V. B. Clark's feed store and produce house and a feed mill house used mainly for storage were destroyed by fire July 16.

Gilmore City, Ia.—Joe McMahon has been made second man at the elevator of the Gilmore Co-operative Co., to succeed John Wall, resigned.

Tabor, Ia.—Charles Dalton, 63, retired from elevator work with the Tabor Grain Elevator after 18 years' service. He was succeeded by Earl McGinnis.

Orange City, Ia.—The Farmers Elvtr. Co. is installing a 20-ton 10 x 34 inch Fairbanks Truck Scale with concrete deck. The Younglove Const. Co. did the work.

Sioux City, Ia.—Charles White, 70, head miller at the Mystic Mills for 20 years, died July 17 at his home after suffering heart attack in yard.—L. A. G.

Gruver, Ia.—The Paul H. Graves Elvtr. Co. had the T. E. Ibberson Co. install an eight-bu. Richardson Automatic Scale and make minor repairs at its elevator.

Marcus, Ia.—The Farmers Elvtr. Co.'s drive-way is being rebuilt, new air dumps installed and general improvements are being made. The T. E. Ibberson Co. is doing the work.

Aplington, Ia.—The Piper Grain & Milling Co. is building a 30,000-bu. storage grain warehouse, of steel roof and siding on concrete foundation. Harm Burma is doing the structural work.

Ackley, Ia.—The Farmers Elvtr. Co. ceased to function with the sale of its remaining property and final dissolution has taken place. The company's assets were bot by August Carstens.

Lorimor, Ia.—Ed. Roseman has completed a 10 x 33 x 10 ft. grain warehouse to be used for storing shelled corn, oats and wheat. The building contains three bins with a 3,000-bu. capacity.

Des Moines, Ia.—Ron Kennedy, sec'y of the Western Grain & Feed Dealers Ass'n, left July 9 for a two weeks' stay in a reserve officers' training camp at Fort Riley, Kan. Mr. Kennedy is a lieutenant.

Cedar Rapids, Ia.—Iowa Soy Products Co., headed by Joe Sinaiko, has contracted with Newell Const. & Mehly. Co. for installation of another Anderson Expeller and drier to bring its battery of these machines to six.

Sioux City, Ia.—T. J. Kelly, manager of the International Milling Co., has been elected a director of the Sioux City Grain Exchange, succeeding John Wacek, who died last May. He will serve until the annual meeting in October.

Harlan, Ia.—The Harlan Rendering Co. elevator has been granted a government storage license R. E. Walters, manager, has announced. The local elevator is one of the very few so licensed elevators in this section of the state.

Toledo, Ia.—The Central Iowa Grain Co. recently remodeled its building and is installing a molasses mixing unit; hulling and rolling oats equipment, with new enclosed Fairbanks-Morse Motors, fan cooled. Younglove Const. Co. has the contract.

Clinton, Ia.—Completion of the new 100,000-bu. grain elevator being built by the Continental Grain Co. is expected to have been completed by mid-August, and it is hoped, grain shipments via the Mississippi River will begin about that time.

Corydon, Ia.—Fred M. West has retired from the grain and seed business in which he has been engaged for 40 years. He was succeeded by Ray Lusher, an employee of Mr. West for 32 years. Ill health was the reason given for Mr. West's retirement.

Fort Dodge, Ia.—A meeting of farmers' elevator representatives and county A.A.A. committee to discuss the details of handling and storing government corn was held here June 14. Don E. Edison, sec'y of the Farmers Grain Dealers Ass'n of Iowa presided.

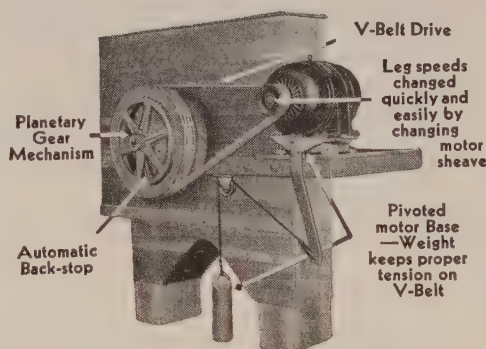
Hubbard, Ia.—The Farmer's Co-operative Elevator has installed a new 20-ton capacity registering beam scale. A. J. Arends, manager, says the 9 x 24 ft. platform will permit them to weigh any truck load of grain regardless of length of wheelbase.—L. A. G.

Armstrong, Ia.—The office of the Rippe Grain & Milling Co., has been reopened with Arthur L. Weise of Blue Earth, Minn., as manager. The office had been closed for several months due to the illness of the former manager, J. O. Johnson, who has retired from the firm.

Atkins, Ia.—The Piper Grain & Milling Co. recently completed a new 20x40-ft. feed house where the new one-ton Kelly Duplex Mixer recently purchased has been installed. The company also purchased a new Kelly Duplex Model L Hammermill which was installed in the old feed house.

Brandon, Ia.—L. L. Froning of La Port City, Ia., is erecting a 10,000-bu. elevator here, Younglove Const. Co. the contractor. The house will have a concrete foundation, waterproof concrete pit; will be of crib construction, iron clad. It will be equipped with an outside truck scale; overhead Kewanee Electric Truck Lift; 14x7-inch Salem Cups on 5-ply rubber belt; 7½ h.p. Fairbanks-Morse Enclosed Motor; Winters Head Drive, complete with roller bearings and man-lift.

You Get All You Pay For--and More-- When You Demand STRONG-SCOTT



STRONG-SCOTT PIVOTED MOTOR BASE HEAD DRIVE

This new development adds greater efficiency to a drive that was already most efficient.

This Pivoted Motor Base is furnished on all new installations in place of the Standard Motor Base. It is simple in design and will take any size head drive motor. It can be furnished for old head drive installations. Easily installed. Write for particulars and prices.

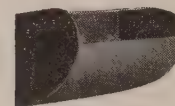
*Everything for Every Mill, Elevator
and Feed Plant*

The Strong-Scott Mfg Co.
Minneapolis Minn. Great Falls Mont.

ELEVATOR CUPS



Superior D.P. or C.C. Greater capacity at an even speed. Their design permits closer spacing than ordinary cups and assure complete discharge.

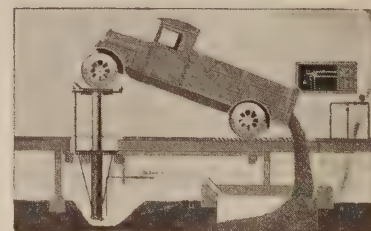


Calumet. Maximum efficiency in picking up material in the boot—speeds can be varied greatly—can be spaced continuous—discharge at higher rate of speed.



STROTTCO BELTING

Efficient, durable and moderately priced. Assures high rate of power transmission and long life. This belting is non-stitched and seamless.



PNEUMATIC DUMP

Saves money on original cost—on installation cost—on operating cost. See catalog 38G or write for full particulars.



Marshalltown, Ia.—Jos. B. Kopel, 48, head of the Kopel Grain & Coal Co., which business he operated for the last 20 years, died suddenly July 4. Kopel Grain & Coal Co. will be carried on by his son, who will be active manager.—Art Torkelson, with Lamson Bros. & Co.

Grundy Center, Ia.—J. Clyde Smith sold his elevator to Theodore Moeller of Waterloo, the latter taking possession July 24. Mr. Smith has been in the grain business here for 17 years and is a director of the Grain Dealers National Ass'n and was president of the Western Grain Dealers Ass'n for three years.

Hills, Ia.—William Griffin of Riverside has leased the local elevator to R. G. Shaver of Kalona, proprietor of the Kalona Grain Co. Mr. Shaver will carry on a general grain business and handle feeds for poultry, cattle and hogs. He will conduct the business under the name Hills Grain Co. The elevator has been idle for about two years.

Lohrville, Ia.—V. J. Bjorkman of Manson has purchased the Lohrville Feed Mill, taking immediate possession. He is an experienced miller having operated a mill at Manson and other locations. He will continue to grind and sell feeds and plans to install a huller in the near future. Jim Shank, former owner, has not announced his future plans.

Randall, Ia.—Walter J. Benson has been elected manager of the Randall Farmers Cooperative elevator, succeeding Martin Peterson who resigned on account of ill health. Mr. Benson, who has been employed as assistant at the elevator for two years, assumes his new duties Aug. 1. Peterson plans to enter the Des Moines veterans hospital for treatment.

Centerville, Ia.—We are constructing new storage tanks, with capacity of 255,000-bu. of soybeans. Tanks will be complete with two 3,000-bu. legs, scalper and grain drying equipment, also facilities for handling truck deliveries. With this addition our storage capacity will be increased to approximately 300,000 bus. of beans and 1,000 tons of meal.—Standard Soybean Mills.

Cedar Rapids, Ia.—Several "corrective measures" were recommended for the Honeyhead Products Co. in a report from a city inspecting com'te recently which substantiated the contention of Fire Chief Kohout that a dangerous fire and explosion hazard exists at the plant. It was recommended that the processing of soybeans be stopped until the added precautions are taken.

Council Bluffs, Ia.—The Omaha Elvtr. Co. has launched a remodeling program to be completed within a year, which includes the installation of new machinery and reconditioning the old as well as putting in modern facilities for handling truck grains. The principal item in the program is an improved unit for cleaning and grading any grain for any market. This new installation will be in operation within a few weeks.

Des Moines, Ia.—The new law licensing itinerant merchants in Iowa had brought in 63 applications by July 6 state public safety dept. records showed. Forty-nine of these operate only within a 50-mile radius, while applications received for operations on a wider radius numbered 14. In addition to the applications at the state office, applications also are received thruout the state in county auditors' offices, number of which received have not been reported as yet.

Des Moines, Ia.—The Inland Milling Co. flour mill was shut down July 7 for one day while officials conferred with representatives of the Flour Mill and Cereal Workers Union. Thirty-one plant employes went on strike when a difference of interpretation of seniority provisions of a union contract now in effect arose. An employee who was injured several weeks ago was replaced by a worker chosen at random instead of the union member qualified by service, it was stated.

Quimby, Ia.—Another Anderson Soybean Expeller and Anderson Drier will be installed in the plant of the Simonsen rendering plant to give this plant a battery of three expellers. Included in the work being done by Newell Const. & Mchy. Co. is construction of 125,000 bus. of bean storage space in a Jamesway steel building 60 ft. wide and 125 ft. long, with 10 ft. side walls, a spiral spreader conveyor at the top, and two screw conveyors at the bottom. A Newell Truck Dump is being installed.

Rockwell City, Ia.—Burns received by Clarence Hinton, 47, manager of the Farmers Grain & Coal Co. elevator, when lightning struck the plant during an electrical storm July 3, proved fatal, Mr. Hinton passing away at a Fort Dodge hospital July 10. He was standing in the drive beside the switch to the hydraulic lift when the bolt struck the top of the elevator and followed thru the metal parts of the structure. A sheet of flame bursting from the control box enveloped him, igniting his clothing which burned from his body, severely burning him on all parts of his body except his chest. Carl Harrison, also burned, is being treated at a Lake City hospital. Paul Reidmiller was less seriously burned.—A. G. T.

Dysart, Ia.—R. V. Leo is building a 16,000-bu. cribbed construction elevator on concrete foundation across from his feed warehouse on ground leased from the Rock Island Railway, to be used as a general grain elevator, but specializing in the purchase of soybeans. There will be 11 hoppers bins, a three-room office; concrete waterproof pit; building and roofs to be covered with galvanized iron; a rapid handling grain leg equipped with spouting for soybeans; 7½ h.p. Fairbanks-Morse Enclosed Motors; Winters Head Drive with roller bearings; electric overhead Kewanee Truck Lift; and 20-ton 9x28-ft. Fairbanks Dump Scale will be installed. A 14x38-ft. driveway will be built between the office and elevator. The Younglove Const. Co. has the contract.

KANSAS

Edmond, Kan.—The Nelson elevator is completed and receiving wheat.

Seranton, Kan.—C. N. Bunds, formerly of Winchester, has opened the local elevator.

Moundridge, Kan.—The Moundridge Milling Co. sustained electrical damage on July 11.

Wellington, Kan.—A small fire at the Farmers Elvtr. Co. elevator recently was caused by an overheated bearing.

Thayer, Kan.—The Green Grain Co. has installed a new state approved grain testing scale. Rex Green is manager of the elevator.

Mankato, Kan.—The O. E. Loomis elevator, located on the Missouri-Pacific right-of-way at the junction of Highway No. 36, is near completion.

Kipp, Kan.—The J. Lynch & Co. elevator was damaged slightly by fire on July 5, caused by a cigarette stub or spark from a switch engine, it is believed.

Salina, Kan.—Francis A. Smith, formerly sec'y-treas. of the Shellabarger Mill & Elvtr. Co., has been named assistant sec'y of the Millers National Federation.

Smith Center, Kan.—The Derby Grain Co. recently built a new scale office 16x22 ft., completely insulated and iron-clad. Ben Munson & Sons were the contractors.

Wichita, Kan.—Rock Island officials were hosts to members of the Board of Trade July 8 at a Dutch lunch served on the trading floor at the close of business that day.

LeRoy, Kan.—Fire, starting in the engine room from an overheated exhaust pipe at the Moore & Meats elevator June 24, was extinguished before much damage resulted.

Lawrence, Kan.—The Bowersock Mills & Power Co. recently completed rebuilding its "wheat house" for cleaning and tempering operations and the installation of new equipment.

Hutchinson, Kan.—The Collingwood Grain Co.'s new 800,000-bu. terminal elevator opened for business June 28 with 200 cars of wheat on the spur track by the elevator ready to be emptied.

Niles, Kan.—The Farmers Elvtr. Co. has erected a 14,000-bu. Columbian steel tank built on a re-inforced concrete foundation and connected to the elevator by steel gravity spouts. Ben Munson & Sons had the contract.

Recent Kansas windstorms damaged property of the following grain companies: Bossemeyer Bros., Courtland, June 21, small loss; Bowen Flour Mills Co., Independence; Consolidated Flour Mills Co., Pawnee Rock.

Lincoln, Kan.—Slipping belts started a blaze in the top of the Farmers Elevator July 3 ruining eight belts but quick action on the part of Ben Wilson, who climbed the ladder and whipped out the flames, prevented heavier loss.

Olathe, Kan.—Newman Bartlett, who has operated the Olathe Milling Co.'s elevator here for the last two years, has returned to Winfield. B. C. Christopher & Co. recently leased the elevator and placed L. F. Beatty in charge as reported in a recent issue of the Journals.

Bird City, Kan.—The McDougal Grain Co.'s elevator has been remodeled and rebuilt, doubling its former capacity. The scale was overhauled and a new platform built; concrete bottoms have been installed in all main bins and concrete bases. A new leg has been built, also. Roy Kemp is manager of the plant.

Hugoton, Kan.—The Security Elvtr. Co. and the Carpenter Grain Co. have opened their elevators for the season. The Security closed three years ago when Bud Huffman was manager. John Rupp is the present manager. The Carpenter elevator has been used the last two years for storage purposes. It is being operated now by Mrs. Edna Carpenter and her son, Billy. Hugoton's other three elevators, the Farmers Supply Co., Wheaton Grain Co. and Parker Grain Co. operate the year round.

St. Francis, Kan.—Paul Barnhouse of Wheeler has leased the St. Francis Milling Co. mill and for the first time in 25 years the management of the business passes from the DeGood family. It will be known in future as the St. Francis Grain & Feed Co. Feed grinding and mixing machinery has been installed and the new firm will specialize in feed grinding and buying of grain. No flour will be milled. Harold Archer will have charge of the plant under the supervision of Mr. Barnhouse, who will retain his interests in Wheeler, spending a portion of his time here.

Topeka, Kan.—The Kansas Sales Tax Token was officially buried on July 6, and the bracket system substituted therefor. Any merchant selling taxable goods will now collect the 2 per cent Kansas sales tax in accordance with the following: First 14c no tax; 15c to 65c—1c; 66c to \$1.24—2c; \$1.25 to \$1.74—3c, etc. (Tax would be 10c on a purchase amounting to \$5.24 or 11c on \$5.25.) Residue of tokens should be redeemed either thru local Chambers of Commerce or the token should be sent prepaid direct to the State Tax Commission at Topeka for redemption.

KENTUCKY

Sedalia, Ky.—Fire recently destroyed the 30-year-old Sedalia Flour Mill, operated by Bob Holmes.

Louisville, Ky.—The Buckeye Cotton Oil Co. has let the contract to Rust & Co. for 2,000,000 bus. concrete storage and will equip its plant here for processing soybeans. H. G. Onstad is designing engineer and supervisor of construction.

MARYLAND

Hagerstown, Md.—The Farm Bureau Co-op. Co. recently purchased a Eureka Corn and Cob Cleaner, Sidney Sheller, hammermill feeder, all furnished by the Sidney Grain Machry. Co.

Frederick, Md.—The Mountain City Grain & Storage Co., Inc., has been incorporated; incorporators, James H. Gambrell, Jr., James H. Gambrell, 3rd, Howard L. Wilkins and Samuel H. Rogers.

Secular-Bishop Grain Co.

GRAIN MERCHANTS

KANSAS CITY WICHITA OMAHA

Official Brown-Duvel
MOISTURE TESTERS
Tag Heppenstall Moisture Meters
and a complete line of grain and seed testing equipment. Every item guaranteed up to government specifications.
HARRY B. OLSON 211 W. Wacker Drive
CHICAGO, ILL.

MICHIGAN

Vernon, Mich.—The Vernon Elevator & Lumber Co. has installed 28 Botimer bean pickers.

St. Claire, Mich.—The Bell River Mills has constructed an additional warehouse, size 24x60 ft.

Whittemore, Mich.—The Whittemore Elvtr. Co. has installed a 47 B cleaner and a 3-h.p. motor.

Tekonsha, Mich.—The Tekonsha Co-operative Ass'n is considering the installation of feed grinding equipment.

Dexter, Mich.—The Dexter Agricultural Ass'n installed a No. 20 feed mixer driven by a 3 h.p. fully enclosed motor.

Elkton, Mich.—The Elkton Co-operative Farm Produce Co. is planning to install a large bean cleaner this summer.

Colon, Mich.—Colon Mills, old time waterpower plant, is to be torn down unless some means is found to preserve it.

Saginaw, Mich.—The Patterson Grain Co. of Toledo has opened a branch office here with Richard Patterson in charge.

Frankenmuth, Mich.—The Star of the West Milling Co. has installed a corn sheller driven by a 5-h.p. fully enclosed motor.

Bay Port, Mich.—The Wallace & Morley Co. has installed an 18D BB cleaner and a fully enclosed 10-hp. Fairbanks-Morse Motor.

Augusta, Mich.—A uniflow grain separator with aspirator and a No. 3 Carter Scalper have been installed in the Knappen Co. mill.

McGregor, Mich.—Four fully enclosed electric motors are being installed in the Bad Axe Grain Co. plant to operate the elevator equipment.

Hudson, Mich.—The Gates Alfalfa Mill has installed a new dehydrator and with the new dryer in operation goes into 24 hr. production.

Otsego, Mich.—Vern H. Pike reports an increasing feed mill business and contemplates the installation of a larger feed mill in the fall.

Pigeon, Mich.—The Co-operative Elvtr. & Milling Co. and the Wallace & Morley Co. reported property damage by wind storm on July 13.

Ogden (Blissfield p. o.), Mich.—The Blissfield Co-operative Co. has installed a No. 16 cleaner and two additional elevator legs and three motors.

Akron, Mich.—The Akron Elvtr. Co. recently installed an 18D BB cleaner, three new elevator legs, and two fully enclosed self ventilated motors.

Chesaning, Mich.—The Michigan Bean Co. has installed a corn sheller driven by a 7½-h.p. fully enclosed motor, and a Eureka Seed Corn Grader.

Hemlock, Mich.—The Hemlock Co-operative Elevator is contemplating an addition to its plant and installation of feed grinding machinery.

Munger, Mich.—A Prater Crusher and Feeder driven by a 5-h.p. motor is being installed ahead of the feed mill in the Chatfield Grain Co. plant.

Ionia, Mich.—The M. C. Stout Elvtr. Co. has remodeled its office. New floors have been laid, new lighting installed and a new roof covers the entire building.

Waldron, Mich.—Dennis Clark, who recently purchased the Avis Mill, is removing all the flour mill equipment and remodeling the feed mill installation.

Woodland, Mich.—The Farm Bureau Services have installed a hammer mill with built-in electro-magnetic protection driven by a 40-h.p. fully enclosed motor.

Capac, Mich.—The Valley Elvtr. Co. is installing a hammer mill with built-in feeder and crusher and electro-magnetic separator to be driven by a 40-hp. motor.

Mayville, Mich.—The Frutchey Bean Co. is installing a hammer mill with built-in electro-magnetic separator and crusher and feeder, to be driven by a 40-h.p. motor.

Deckerville, Mich.—A new hammer mill with built-in crusher and feeder and electro-magnetic separator have been installed recently in the Michigan Bean Co. plant.

North Branch, Mich.—A Blue Streak Hammer Mill with built-in electro-magnetic separator and a Master Feed Mixer recently have been installed in the Harper Elevator.

Montrose, Mich.—An attrition mill with built-in electro-magnetic separator driven by a 20-h.p. direct connected motor will be installed in the Frutchey Bean Co. elevator.

Elsie, Mich.—Glen S. Wilcox has purchased the flour mill formerly operated by Floyd W. Bouch. A Jacobson Electro-magnetic Separator has been installed ahead of the feed mill.

Bradleyville (Akron p. o.), Mich.—A hammer mill with built-in electro-magnetic separator and an 8D BB cleaner have recently been installed in the Wallace & Morley elevator.

Hemlock, Mich.—The new elevator of Charles Wolohan, Inc., is complete and ready for operation. All equipment is modern and up-to-date and will be driven by fully enclosed motors.

Tecumseh, Mich.—The Holtrum Coal Co. is now in the feed grinding business. Equipment consists of a hammer mill, a feed mixer and a sheller, all driven by a 125-h.p. diesel engine.

Morenci, Mich.—Burton Deyo has installed the Eureka Combined Corn Cob and Small Grain Cleaner with Buhler Drive that he bought from the Sidney Grain Machinery Co., together with a large elevator.

Middleville, Mich.—A. G. Finkbeiner & Son have constructed a new feed mill. Equipment consists of a hammer mill and a built-in electro-magnetic separator driven by a 50-hp. motor, a ½-ton feed mixer and a corn sheller.

Fairgrove, Mich.—The Wallace & Morley Co. elevator is being enlarged by a new addition 30 x 40 ft. Additional equipment will consist of a cleaner and elevator legs, a hopper scale, a manlift and two fully enclosed motors.

Smiths Creek, Mich.—H. E. Neal has installed new feed grinding equipment, consisting of a hammer mill equipped with a built-in crusher and feeder and electro-magnetic separator, a sheller and 1-ton mixer.

Breckenridge, Mich.—The Ithaca Roller Mills recently installed in the local elevator a cleaner No. G 54, driven by a 7½-hp. G. E. fully enclosed Motor, and recently have completed also a new warehouse 30 x 88 ft., 22 ft. west of the elevator.

Decatur, Mich.—C. E. Wickett & Co. has recently moved its feed mill to a new location and installed new equipment consisting of a hammer mill with built-in crusher and feeder and electro-magnetic separator driven by a 30-hp. fully enclosed motor.

Coloma, Mich.—The Coloma Fruit Exchange is installing refrigerating machinery and cold storage space in the tile fruit warehouse. In the feed mill it has installed recently a new attrition mill with electro-magnetic separator and a Blue Streak Corn Cracker.

Elkton, Mich.—The Wallace & Morley Co. is enlarging its elevator at this station. New equipment will consist of a hammer mill with a built-in feeder, crusher and electro-magnetic separator, a 99D cleaner, a McMillin Truck Dump, and a No. 18 cleaner.

Gobles, Mich.—Electric power is being substituted for all engine power in the Gobleville Milling Co. plant. New equipment consists of a hammer mill with built-in crusher and feeder and electro-magnetic separator to be driven by a 30-hp. fully enclosed motor.

Grand Ledge, Mich.—New feed mill equipment is being installed in the Grand Ledge Produce Co. feed mill, consisting of a Blue Streak Hammer Mill with built-in feeder and crusher and electro-magnetic separator and a feed mixer. Most of the motors will be fully enclosed.

Schoolcraft, Mich.—New feed mill equipment has been installed in the Harvey & Stuart elevator, consisting of a hammer mill with built-in crusher and feeder and electro-magnetic separator driven by a 30-hp. motor. A 7½-hp. motor was installed also to drive the corn sheller.

Freeport, Mich.—Walter Wingeier of Lowell has purchased an interest in the Runciman elevator, taking charge at once. Louis Overholt, manager for several years, will continue in practically the same capacity. Many improvements are being made, including addition of new equipment.

Waldron, Mich.—Dennis L. Clark of Fremont, Ind., has bot the milling business of Harry Groff, who recently purchased it from C. C. Raser. Mr. Clark, who has had a wide experience in the feed business, will discontinue the manufacture of flour and specialize in feed grinding. New and larger equipment will be installed.

AMERICA can easily prevent most any foreign war — could have prevented World War — How? — Courage — foresight — action. Massing her Pacific fleet a hundred miles from Tokio — at proper time — quietly — without explanation — no China-Jap War. Babson says that a few words of the right sort from the United States now and "all war talk would cease immediately" — and millions of lives might be saved — billions of dollars — just courage — foresight — common sense.

LOWELL HOIT & CO.

Ithaca, Mich.—The Ithaca Elvtr. Co. is installing a 50-hp. motor to drive the feed mill instead of a 40-hp. Recently the company installed a hammer mill with built-in feeder and crusher and electro-magnetic separator driven by a 40-hp. G. E. fully enclosed motor.

Carleton, Mich.—The new offices of Kahlbaum Bros. mill and elevator are nearly completed. The rooms are in the lower part of the mill and connected to the present office on the first floor by a stairway. A cooling system has been installed, a fire-proof vault built and two private offices provided.

Barryton, Mich.—The Barryton Co-operative Ass'n, Inc., has purchased the Barryton Grain Co. elevator and business and will take possession at the completion of an inventory being made. The elevator office will be used and a new scale will be installed in front of it and the gasoline and oil pumps moved there. Bert LaMoreaux was formerly manager of the elevator and Sherm Kinney, elevator man. It had been the plan of the former owners, which was an heirship property, to close the elevator and dispose of the machinery.

Saginaw, Mich.—The bean grades committee of the Michigan Bean Shippers Ass'n met July 13 at the Bancroft Hotel to discuss the state department of agriculture's recommendation that all dry edible beans produced in Michigan be subject to compulsory grading. The meeting was one of several in which the committee has been discussing recommendations and procedures to be followed. Recommendations were made that all dry beans produced in Michigan be made subject to compulsory grading when the existing contract between the ass'n and the department for the grading of beans is renewed in August. Under the contract in effect during the past year, navy beans only have been subject to inspection. Rigid enforcement of the inspection service was urged. Representing the Bean Shippers were A. C. Walcott, sec'y of the ass'n; Leo D. Cline of Birch Run; Herman Henne, Bay Port; Neil H. Bass, Lansing; A. B. Love, Michigan State College, and E. W. Todd of Owosso.

MINNESOTA

Hector, Minn.—The Hector Co-operative Milling Co. has constructed a 16 x 24 ft. flour house.

Browns Valley, Minn.—The Interlake Mill & Hatchery has installed new belting and Calumet Cups.

Anoka, Minn.—The Anoka Feed Mill has added a Howell North Star Corn Sheller to its equipment.

Waubun, Minn.—The Waubun Elvtr. Co. sustained a small property loss as the result of high winds July 2.

Foxhome, Minn.—P. H. Gust of Henning has equipped his local feed mill with an electromagnetic separator.

Rushmore, Minn.—Sumner Malmquist has been made second man at the Farmers Grain & Supply Co. elevator.

Clarkfield, Minn.—Earl Johnson, formerly manager of a Wall, S. D., elevator, is now manager of the local elevator.

Dunnell, Minn.—George A. Weir, manager of the Farmers Elvtr. Co., resigned recently and was succeeded by Carl Anderson.

Luverne, Minn.—The Ashcreek Farmers' elevator, operated for the past four years, has been closed. Chas. A. Carter was manager.

Plainview, Minn.—Bruce Oxtan has purchased the B. F. Nichols feed mill and elevator here. He will continue the business and will sell mixed feeds and coal.

Coates (Rich Valley, p.o.), Minn.—The local grain elevator has been leased by Leo Fluegel of Rosemount and is open for business. A. Elston is in charge.

Sabin, Minn.—The National Atlas Elvtr. has awarded contract to the T. E. Ibberson Co. for the installation of a new 10-ton scale, 20 ft. long, to be installed in its elevator.

Red Lake Falls, Minn.—Thos. Ducharme, manager of the Northern Seed & Grain Co. elevator at Perrault Station, has resigned and will be succeeded by Jos. H. LaCoursiere.

Dundee, Minn.—The Farmers Elvtr. Co. will have a new leg and general repairs made by the T. E. Ibberson Co. at its elevator. A new Strong-Scott Air Dump will be installed in the driveway.

Minneapolis, Minn.—The membership in the Chamber of Commerce of the late George M. Palmer, president of the Hubbard Milling Co., Mankato, Minn., has been transferred to P. L. Kimble, vice-pres. of the company.

Brewster, Minn.—The two Hubbard & Palmer elevators are being remodeled and enlarged. The present capacity of the elevators, 20,000 bus., is being increased to 25,000 bus. The new addition will be completed by Aug. 1.

Kiester, Minn.—Wilbur K. Schulte of Dundee is new manager of the Kiester Co-operative Elvtr. Co. elevator, replacing F. M. Seedorf who has served as manager for the last two years. Mr. Schulte has had considerable experience in the grain buying business. He was manager of the Dundee elevator for the last year.

St. Cloud, Minn.—William Pachall, of St. Joseph, has purchased the flour and feed store of Ben Aschenbrenner, who has retired from the business. Mr. Pachall will grind feed and carry a complete line of flour and feed.

Mahnomen, Minn.—The newly organized Farmers Elevator group has purchased the south elevator from the Kellogg Commission Co. Numerous improvements are planned, including the installation of a high speed elevator system.

Jasper, Minn.—The Farmers Warehouse Co. recently completed general improvements in its elevator, including the installation of a Howell Electric Overhead Truck Lift, new Howell Boots and Heads, Atlas Bucket Belting, and Calumet Cups.

Goodhue, Minn.—T. C. Matyas of Lakefield, Minn., has been named manager of the Goodhue Elvtr. & Mercantile Ass'n. Mr. Matyas has had 10 years' experience in the grain buying business. J. F. Barry, former manager, recently resigned.

Nassau, Minn.—The Nassau Farmers Elvtr. Co. voted to extend its charter for another 20 years. They also voted to reduce the par value of the stock from \$20 to \$10 per share. The company reported the greatest net profits in the history of the organization.

Mountain Lake, Minn.—The Co-operative Farmers Elvtr. is putting a new foundation under its scale platform and a driveway; a set of double windows is being placed in the south wall of the scale office and a small addition to house the safe is being added to the main office room.

Mankato, Minn.—Timely discovery and prompt action on the part of a passerby recently saved the elevator of C. A. Nachbar Co. from what might have been a disastrous blaze. Discovering a wad of oily waste between the grain door and elevator blazing, he put out the fire with small damage resulting.

Barnesville, Minn.—A. E. Mosbrooker is new manager of the Monarch Elvtr. Co.'s plant. Mr. Mosbrooker formerly managed the company's elevator at Dazey, N. D., for the last five years. Prior to that he was located at Beulah, N. D. B. G. Nemitz, now located at Hayfield, was former manager.

Minneapolis, Minn.—Instead of reporting sales of cash grain as over or under the future, the directors of the Chamber of Commerce have ruled effective July 21 that the price shall be stated. Also such notations as deemed necessary in indicating the character of the grain shall be given, such as "Heavy dockage," "Choice," "O.W.B.," and in the case of corn to state the color of the corn. Sales at diversion points shall be distinguished by the notation "D.P."

Glyndon, Minn.—The two local elevators of the National Atlas Elvtr. Co., Minneapolis, have become the property of the newly organized Clay Center Co-operative Ass'n. The elevators have a combined capacity of 60,000 bus. Closing of the deal meant the abandonment of the latter company's previously announced plans to build an elevator.

Mankato, Minn.—A soybean processing plant for the Mankato Soy Bean Processing Co. is being installed by Newell Const. & Mch. Co. in the old Minnesota Tile Co. factory. Construction includes 80,000 bus. of soybean storage space. Machinery being installed includes an Anderson Expeller, an Anderson Drier, an Ellis Cooler, a 50-h.p. boiler, a Blue Streak Hammer Mill, a filter, a roller mill, and a Kenyon Crusher. The plant, when completed, will be managed by Riley Lewis, formerly of Mason City, Ia.

Lake Crystal, Minn.—Earl Pepper was transferred by Hubbard & Palmer from their elevator at Vernon Center to their local unit, beginning his duties as manager here July 1. He had been manager of the Vernon Center plant for the last five years. G. W. Clark, formerly manager here, gave up his duties because of ill health. He had held the position for 20 years. As recognition of his ability, he will be retained on the pay roll altho relieved from active duty. Before coming to Lake Crystal Mr. Clark bought and sold grain for 20 years for concerns in North Dakota.

Franklin, Minn.—The Caven Elevator, destroyed by fire July 5, will be rebuilt. The new structure will be a 25,000-bu. modern cribbed grain elevator, equipped with 28-inch attrition feed mill, 2,000-lb. capacity feed mixer and a 20-ton platform scale. The foundation of the old building was not damaged by the fire, a fact that will facilitate construction of the new house. The blaze that destroyed the elevator is believed to have started on the second floor. Books and records from the office were saved, also some of the feed stored in the warehouse. The two steel bins adjoining the wooden structure were not burned. The elevator contained about 600 bus. of wheat, oats and corn.

Kennedy, Minn.—Contract for the building of a 30,000-bu. capacity grain storage annex to the Farmers Grain & Supply Co. elevator owned by McCabe Bros., was let recently and work has started. A. C. Hjeltness is manager of the elevator. The new building, erected north of the elevator proper, will have six grain bins with a capacity of more than 5,000 bu. each; the entire building will be given a sheet steel sheathing. The new annex will double the storage capacity of the present elevator. The old building is being remodeled and repaired; new sills are being put in thruout the building; new cups are being installed; a new scale, new elevating equipment and a new dump are being added; a new office is being built and the drive-ways remodeled.

DULUTH LETTER

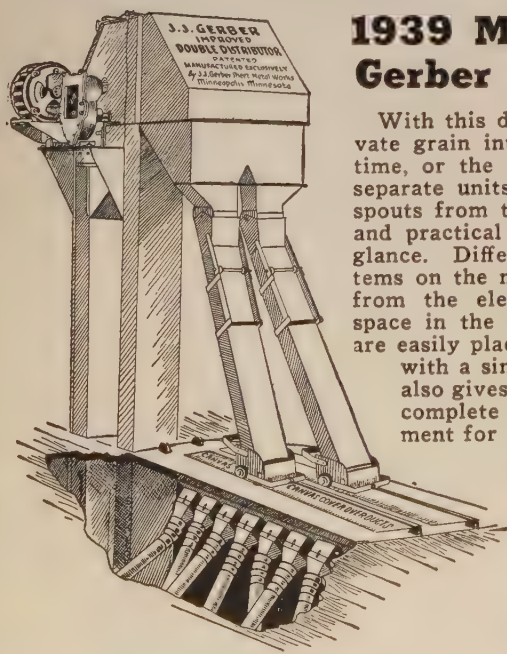
Morton G. McQuade, Duluth, has been appointed a member of the local Board of Grain Appeals by Governor Stassen, effective July 1.—F. G. C.

Stockholders of the Consolidated Elvtr. Co. at a meeting in St. Paul July 12 took first steps to reincorporate the company formed in 1894 and scheduled to expire in 1944. The Consolidated operates six elevators in Duluth.

Fred S. Keiser, Duluth Chamber of Commerce traffic commissioner, was in Minneapolis last week presenting arguments at a hearing before the interstate commerce commission opposing a cut on export grain via rail from Chicago to Atlantic ports.—F. G. C.

Rumored that McCabe Bros. Co., Duluth and Minneapolis, grain interest is negotiating for lease of the Kellogg elevator at Superior, Wis. Spencer Kellogg & Sons, Inc., are the owners and except for a small cargo of Argentine flax recently stored the elevator has been closed down since last fall. The plant has a capacity of 1,250,000 bus.—F. G. C.

Duluth commission men are gladly offering their service to growers in cleaning up government loan odd lots. Anyone anxious to clean up such lots before the new crop movement is advised to send in a list of holdings together with grade, test weight, protein, if possible accrued storage and other details and he will readily arrange to dispose of same thru the proper channel.—F. G. C.



1939 Model Improved Gerber Double Distributor

With this device both legs can be used to elevate grain into a single bin or car at the same time, or the individual legs can be operated as separate units. It eliminates a complete set of spouts from the distributor to the bins. Simple and practical . . . its value is appreciated at a glance. Different from kindred distributing systems on the market, it operates horizontally out from the elevator's legs, occupying a narrow space in the cupola, and the telescoping spouts are easily placed in position from the work floor with a single movement of a windlass, which also gives the bin position. It is manufactured complete with all necessary operating equipment for any desired elevating capacity.

Also made for single, triple and four stands of elevator legs.

Write for Catalog H-1

**J. J. Gerber Sheet
Metal Works**

Minneapolis, . . . Minn.

R. J. Huseby, wheat buyer for the Pillsbury Flour Mills at Minneapolis, was in Duluth for the annual Board of Trade Golf tournament, held at Ridgeview course, July 13. Fred Trambly, with the Barnum Grain Co., copped first prize, shooting 64 with a 36 handicap. There were 35 entries and 23 prizes.—F. G. C.

Duluth, Minn.—Grief-stricken over the accidental death of his wife July 8, Roland H. Tietze, vice pres. and sec'y of the Atwood-Larson Co., grain dealers, took his life several hours later at his home. Mr. Tietze served as a director of the Duluth Board of Trade and president of the Grain Commission Merchants Ass'n, and out of respect to his memory the exchange suspended trading at noon July 12, the day of the funeral service. Mrs. Tietze was a daughter of the late H. J. Atwood, pioneer Duluth grain man. Her death was caused by carbon monoxide poisoning while starting her auto in the family garage.

MISSOURI

Troy, Mo.—Farmers Elevtr. & Supply Co. contemplates installation of a small feed mixer this fall according to Mgr. F. W. Wiemann.

Maysville, Mo.—A shaft housing broke down and contacted the shaft recently at the Maysville Co-operative Ass'n elevator, causing a damage loss.

Kansas City, Mo.—The Equity Union Grain Co. held a special stockholders meeting June 20 when changes to be made in the company's by-laws were adopted.

Kansas City, Mo.—B. C. Ragan, 86, founder of the Ragan Grain Co., and father of Harry R. Ragan and Carrol C. Ragan of the present firm, died July 21, at his home at Valley Falls, Kan.

Moscow Mills, Mo.—Farmers Elevtr. & Supply Co. has installed a half-ton Brower Vertical Feed Mixer. Next on the improvement list, contemplated for installation this fall, is a new hammer mill to replace the present one, according to Mgr. F. L. Dreyzehner.

Rockport, Mo.—W. T. Crews of Mound City is the new manager of the Norris Grain Co.'s elevators here, at Langdon and Nishnabotna, succeeding Frank M. Scott, who is engaged in a hybrid seed project of the Peppard Seed Co. of Kansas City. Mr. Crews was associated with the Brownfield & Teare elevator at Craig for a number of years.

MONTANA

Basin, Mont.—The new bean warehouse on the site of the E. H. Walrath & Sons mill is being rushed to completion.

Fort Benton, Mont.—A new 15-ton Fairbanks Dial Scale has been installed at the Greeley elevator and the office has been remodeled.

Richland, Mont.—Sig Lund, formerly with the Equity Elevtr. Co. at Wolf Point, has succeeded E. K. Babcock, who resigned as manager of the Farmers Union Elevtr. Co.'s elevator.

Lewiston, Mont.—Manager G. L. Friedlein of the Farmers Elevator has returned from the St. Joseph's Hospital where he was undergoing treatment for two weeks for an arm infection.

Harlowton, Mont.—After being closed down for the past month for general overhauling and repair of machinery, the local mill of the Montana Flour Mills Co. resumed operation recently.

Great Falls, Mont.—Cascade Mills, Inc., has been organized to engage in a general milling business. Capital stock: \$60,000. Incorporators: P. G. Hughes, W. H. Bertsch, Jr., E. E. Ludwig and R. J. Reynolds, all of Great Falls.

Poplar, Mont.—Poplar Elevtr. Co., Inc., has been organized to do a grain, farm machinery, oil and gas and livestock business. Incorporators: Ben Zimmerman, J. H. Frerich, Roy White, Earl Iverson, R. E. Nordwick and C. L. Smith, all of Poplar.

Great Falls, Mont.—H. D. Myrick of Square Butte was re-elected president of the Farmers Co-operative Elevtr. Ass'n of Montana at the organization's annual meeting June 22. Adolph Frieberg of Inverness was elected vice-pres., and Senator A. E. Kathan of Brady, re-elected sec'y-treas. Close to 300 managers, directors and members of elevator co-ops. were present. Following the business session they were guests of the Farmers Union Grain Terminal Ass'n at the annual banquet.

Poplar, Mont.—E. K. Babcock recently resigned as manager of the Farmers Union elevator at Richland to accept the position as manager of the local Farmers Union elevator.

NEBRASKA

Melbeta, Neb.—L. P. Luper has purchased the Farmers Union Elevator.

Crookston, Neb.—The Chadron Flour Mills is rebuilding its annex so it will hold wheat. W. H. Cramer has the contract.

Carleton, Neb.—R. C. Smith will continue to operate the former Shannon Grain Co. elevator under the new owners, Hart-Bartlett & Sturtevant of Kansas City.

Cozad, Neb.—Plans have been announced for rebuilding the Noel Cover Alfalfa Meal plant which was destroyed by fire July 2 with an estimated loss of \$50,000.

North Loup, Neb.—On July 27 the old grain elevator owned by the late Robert Preston and used by the George E. Johnson firm, will be sold at public auction along with equipment.

Minitare, Neb.—L. P. Luper is constructing additional storage room at the Luper Bean elevator. The new building will be 40 x 80 ft. and 25 ft. high and will store 100 carloads of beans.

Franklin, Neb.—The Harris Grain Co. recently completed improvements at its elevator; the office was moved closer to the elevator and a long extension was built onto the elevator for more efficient and convenient service.

Sutherland, Neb.—L. Spelts of Oshkosh recently leased the Burklund Elevator which is open for business. Mr. Spelts long has been associated with the grain business and for the past ten years operated elevators on the high-line.

Farwell, Neb.—The B. C. Christopher & Co. has taken over the elevator operated as the Farmers Co-operative Grain & Supply Co. and placed B. V. Maschka in charge as manager. The elevator has not been operated for the last several years.

Alliance, Neb.—The O. M. Kellogg Grain Co.'s new grinding plant and 25,000-bu. storage annex have been completed and a new 20-ton 34x9-ft. Fairbanks Scale with concrete deck and type registering beam has been installed. W. H. Cramer had the contract.

Gordon, Neb.—The newly founded Farmers Co-operative Grain Co., which recently purchased the Gordon Co-operative Grain Co. property and its lease on the elevator, took charge of the business July 1. Frank M. Roth is continuing as manager of the elevator.

Fairbury, Neb.—Fred Preston, president of the Fairbury Mills Co., has purchased the interest of J. G. Weins in the company. No changes in the policies of the firm are contemplated by Mr. Preston. Fairbury Mills Co., organized in 1935 and succeeding the Fairbury Alfalfa Mills, manufactures livestock and poultry feeds.

Hemingford, Neb.—William Hagemeister and sons Dean of Potter and Bruce of Angola have purchased the elevators of the Hemingford Grain & Oil Co., here and at Nonpareil, taking charge July 3 and are conducting the business under the name, Hagemeister Grain Co. Bruce Hagemeister has resigned his position with the R. S. Proudft Co. at Angola and is in charge of the local elevator.

Omaha, Neb.—The Butler-Welsh Grain Co. July 12 took over operation of the 450,000-bu. grain elevator on the Milwaukee Railroad tracks in South Omaha, owned by the railroad. Lease of the elevator was transferred to the Butler-Welsh Co. from the Updike Grain Corp., which has operated it for many years. The Updike Co. will continue to operate the large elevator in Council Bluffs owned by the Northwestern Railroad.

Shelton, Neb.—During a rain and electrical storm July 4 a heavy bolt of lightning struck an electric line leading into the office of the Updike Grain Corp.'s elevator. All insulation was burned off the wires, paper signs and calendars were burned off the walls, and a large hole was burned in a table directly under the electric switch. The damage was not discovered until the manager, Calvin Tomlinson, arrived for work July 5. He believes the fact that the office and elevator doors were closed prevented the building from catching fire.

Falls City, Neb.—The Falls City Mill, to solve the problem of cooling city drinking water, runs the water thru a two-inch pipe which descends to a depth of 20 ft. into the ground, makes a turn and comes back to the surface. The coolness of the earth reduces the water temperature considerably.

NEW ENGLAND

Springfield, Mass.—Directors of the New England Retail Grain Dealers Co-operative Ass'n held a meeting at Hotel Highland June 29. Joseph Lavitt of Rockville, Ct., discussed poultry and dairy feeds, and co-operative raising of broilers and James Curtis of Sharon, Vt., spoke on the dairy interests in his state.

NEW JERSEY

Hamburg, N. J.—The local flour mill property has reverted to the National Milling Division of National Biscuit Co. It had been acquired recently by the Century Milling Co.

NEW MEXICO

Roswell, N. M.—The Mayes Lumber & Grain Co. lumber yard and its buildings were destroyed by fire started when lightning struck buildings in the center of the yard the night of June 27.

NEW YORK

Knowlesville, N. Y.—The Knowlesville Storage Corp. has installed a one-ton Eureka, Jr., Mixer.

Livonia Center, N. Y.—The 125 year old Salsich mill building was damaged by fire early in June.

New York, N. Y.—B. Henry Sincere, Sincere & Co., Chicago, was elected to membership in the Produce Exchange.

Pittsford, N. Y.—Victor Flour Mills, Inc.'s new grain elevator of 100,000 bus. capacity will be completed about Aug. 1.

Brooklyn, N. Y.—William Gleichmann, 73, retired hay and grain merchant, died in St. John's Hospital June 28 after an eight weeks' illness.

Bliss, N. Y.—R. B. Cornell & Co. has installed a Blue Streak Hammer Mill with built-in electro-magnetic separator, a crusher and feeder, and a molasses mixer.

Bliss, N. Y.—The James H. Gray Milling Co.'s plants here and at Collins have been equipped with lightning rods. These plants are operated under the name of R. B. Cornell & Co.

Albany, N. Y.—The Barber & Bennett feed and grain plant was badly damaged by fire of undetermined origin early July 4. Originating on the third floor the heat set off the automatic sprinklers.

Buffalo, N. Y.—Feed Products Corp. has been indicted by the Federal Grand Jury at Jamestown on charges of having asked and received railroad freight rates lower than the legal rates in force in interstate commerce. Eugene B. Collard is president and Charles H. Collard, secretary-treasurer. The violations were alleged to have been committed in 1937 and 1938 in connection with numerous railroad shipments of cracklings to Buffalo.—G. E. T.

LIBERTY GRAIN BLOWERS

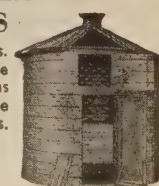
fill cars to capacity without inside scooping in 1½ to 2 hours. Saves expense of scooping labor, and loads more cars per day. Easily moved from place to place. The only thing for loading cars on R.R. spurs. Write for particulars.

Midwest Steel Products Co.
728 X Delaware, Kansas City, Mo.

MIDWEST GRAIN BINS

answers your surplus storage problems. 5 sizes, 500 to 2250 Bu. Easy to move or erect. Extra profit also selling bins to your farmer customers who require farm storage. Also steel Corn Crib. Write for particulars.

Midwest Steel Products Co.
728 X Delaware, Kansas City, Mo.



Delhi, N. Y.—Fire destroyed a small storage building owned by Dean & Bramley, feed dealers, late July 13. Prompt action of village volunteer firemen prevented the flames spreading to the feed mill and coal sheds near by.

Buffalo, N. Y.—The Buffalo Federation of Labor on July 13 expelled the Grain Elvtr. Employees Local 1286 from membership because it joined the C.I.O. locals in opposing amendments to the Wagner Act, which the Federation of Labor and its executive council supported. Flour, Feed and Cereal Workers local 12184 also opposed amendments, but later rescinded its action.

Buffalo, N. Y.—The Pillsbury Flour Mills Co. has let the contracts for a bulk flour storage plant and a packing building to the Jones-Hettelsater Const. Co. The bulk flour unit will be 44x100 ft. and will contain 73 concrete, airtight bins of 770 bbls. capacity each, allowing total flour storage of nearly 5½ days' production; the local plant has a daily output of 10,000 bbls. The packing structure will be erected adjacent to the flour storage building and will be of reinforced concrete. It will ultimately house sufficient equipment to permit packing of 20,000 bbls. of flour in a single day—twice the daily output. Work has started on the project, which is to be completed by Dec. 1. Each bin in the storage unit will be equipped with complete feeders to facilitate blending operations; each packer in the new packing building will have its own rebolt sifter overhead. The company will continue to use its present packing department for export shipments.

NORTH DAKOTA

Buffalo Springs, N. D.—Fire destroyed the Western elevator here.

La Moure, N. D.—The Farmers Union has purchased the Andrews Grain Co. elevator and has opened for business.

Braddock, N. D.—L. W. Berkholtz of Hazelton has purchased the Farmers Elevator, closed for the last several years.

Dickinson, N. D.—John Ganzer, elevator employee here for the past 10 years, has taken over the management of the Dickinson Occident Elvtr. Co.

Wales, N. D.—O. K. Johnson, manager of the Maida Farmers elevator, has purchased the Wales Farmers Elvtr. Co. property and is operating it.

Velva, N. D.—The Velva Farmers Union Elevator Co. has taken over the property of the Velva Farmers Elvtr. Co. Arthur Ness will be retained as manager.

Maida, N. D.—John W. Hyslop has succeeded O. K. Johnson as manager of the Maida Farmers Elvtr. Co. elevator. Mr. Johnson purchased an elevator at Wales.

Kenmare, N. D.—The Occident Elevator, sold to the Osborne-McMillan Elvtr. Co., was closed recently. E. S. Loader has been manager of the elevator for 21 years. The elevator had been operated here for 38 years.

Bowbells, N. D.—Clyde Ridenour, manager of a grain elevator at Norma, has accepted the position as manager of the elevator of the newly organized Bowbells Co-operative Elvtr. Ass'n. The elevator is being remodeled.

Great Bend, N. D.—The Farmers Mill & Elvtr. Co. is having the T. E. Ibberson Co. install two scales, a 20-ton scale is being installed in the driveway and a coal scale at the outside of the building. Other improvements are being made.

New England, N. D.—Merve Grannis is new manager of the Geo. C. Bagley Elvtr. Co. elevator, succeeding J. F. Sondag, who resigned. Mr. Grannis was manager of the Farmers Co-operative Elvtr. Co. elevator at New England for about nine years.

Crosby, N. D.—John Nordstog, who has been engaged in the independent grain buying business in Crosby and vicinity for a number of years, disposed of his elevator recently to the Farmers Union Elvtr. Co. of Crosby. He will remain with the company as manager of the elevator.

Page, N. D.—The J. C. Miller Elvtr., closed since 1928, has been repaired and painted in preparation for opening in time to receive grain of the 1939 crop. The elevator is one formerly owned by the North Dakota Wheat Growers Ass'n. Miller and his sons own a line of elevators in the state.

Hazelton, N. D.—Mike Pfugrath has taken over the management of the Farmers Union Elvtr., formerly owned by L. W. Berkholtz.

Harwood, N. D.—The Harwood Farmers Elvtr. Co. has awarded contract to the T. E. Ibberson Co. for general repairs on its plant. A new boot tank will be installed, as well as other equipment.

OHIO

Miamisburg, O.—The Peerless mills, an old land mark, is being torn down.

Gettysburg, O.—William Toman elevator was damaged by high winds recently.

Carroll, O.—We have installed a new McMillin Truck Dump in our local plant.—Carroll Elvtr. Co.

Kansas, O.—B. J. Burkett, of Lindsey, former manager of the Peoples Elvtr. & Supply Co. at Fremont, has purchased the local elevator.

Wilmington, O.—E. N. Troyer, new owner and manager of the Bloomville Flour Mill, recently installed a new mixer. He has put the plant in good condition thruout.

Marysville, O.—Included in the new equipment installed by the Ohio Grain Co-operative is a conveyor, manlift, elevator, drives, all furnished by the Sidney Grain Machry Co.

Bettsville, O.—Dayton Adelsparger has sold the Bettsville Grain & Supply Co. business to Walter Swartz, formerly general manager of the Luckey Farmers Exchange Co., Luckey, O.

Toledo, O.—The Toledo Grain & Milling Co. has completed extensive repairs to its plant which was partially destroyed by fire last February. The work included the installation of a modern hopper scale.

Glen Karn (Hollandsburg p. o.), O.—Clark Mote, proprietor of the grain elevator at Laura, O., has purchased the local elevator, taking possession July 3. His son, Tom Mote, is in charge of the business.

Plain City, O.—A slipping "V" belt caused a small fire in the cupola of the Latham & Nau elevator on July 11, which was extinguished by prompt and efficient work of employees supplied with buckets of water.

Troy, O.—Russell E. Royer, assistant manager of the Troy Grain & Supply Ass'n elevator the last six years, has been made manager of the company's business, succeeding Paul Hance, who resigned after serving eight years in that capacity.

Napoleon, O.—Napoleon Grain & Stock recently purchased considerable new equipment including boot sheller, scalper reel, drag, head drive, electric motors with drives, and a Eureka Combined Corn and Grain Cleaner with Buhler Drive, all furnished by the Sidney Grain Machry Co.

Mount Victory, O.—Charles W. Mollett and Everett Brugler have leased the Mount Victory Milling & Grain Co. elevator from R. B. Coughill. Both men have been associated with Mr. Coughill in the operation of the elevator for several years. Business will be conducted along the same policies in the future as in the past.

Luckey, O.—William Schnitker, manager of the Woodville unit of the Luckey Farmers Exchange Co., has been appointed general manager of the company's three elevators located at Luckey, Woodville and Lemoyne, entering on his new duties July 1. He succeeded Walter Swartz, who recently resigned to operate his own elevator at Bettsville.

Toledo, O.—The Toledo Board of Trade is extending an invitation to the Grain & Feed Dealers National Ass'n to hold its 1940 meeting in Toledo. The invitation was first extended to the ass'n at its Toronto meeting last fall. Delegates have been appointed to attend the forthcoming meeting in Minneapolis where another invitation to come to Toledo in 1940 will be presented.

Columbus, O.—The annual fall meeting of the Ohio Grain, Mill & Feed Dealers Ass'n will be held at the Greenville Golf Club, Greenville, O., Tuesday, Sept. 19. The meeting will start at 10 a. m., with lunch at 1 p. m., followed by games—golf, tennis, horse-shoe, etc., with prizes awarded the winners. New members recently enrolled by the Ass'n include Brown-Burnworth, Bremen, O.; the Drackett Co. (soybean processors), Cincinnati; White Laboratories, Inc., New York, N. Y.—W. W. Cummings, sec'y.

Holgate, O.—The Holgate Grain & Supply Ass'n has electrified its plant. Some 24 motors have been installed. The feed grinding machinery has been moved to an enlarged building adjacent to the main offices; a sheltered approach was installed permitting unloading direct into conveyors protected from the weather. Wiley Jackson is manager of the plant.

Amsden, O.—The elevator owned by Charles Ash and operated by Richard Lyon was destroyed by fire the night of July 12 with a loss estimated at \$25,000. Friction from heavily worked machinery or spontaneous combustion are believed to have caused the fire. The building, filled with grain, and three box cars on the elevator siding, one of which was filled with wheat, were burned.

Columbus, O.—Grainmen over the state are writing and wiring their representatives in Congress to support the Bardon Bill (H. R. No. 7133), now about to come before Congress in Washington. This bill would give full exemptions to country elevators, without the seven-man limitations clause. The Ohio Grain, Mill & Feed Dealers Ass'n has written each Ohio Congressman asking his support of the measure.

West Liberty, O.—Don H. Yoder and Paul King, proprietors of the D. H. Yoder & Co. grain elevator that was destroyed by fire early July 15, are considering plans to rebuild. The fire, of unknown origin, burned the building, 4,000 bus. of wheat, 1,000 bus. of corn and oats, along with a quantity of feed, bran, cotton seed and soybean meal. Two loaded railway freight cars, each containing over 1,800 bus. of wheat, were also destroyed.

OKLAHOMA

Roosevelt, Okla.—The Adair-Morton Grain Co. elevator was destroyed by fire on July 9.

Helena, Okla.—The Farmers Co-operative Ass'n elevator was damaged by fire on July 7, caused by shaft housing coming in contact with a shaft thru a bin.

Idabel, Okla.—The Griffith-Hendrix gin is installing new equipment and undergoing a general overhauling. A seed house and seed elevator is being constructed, to be completed this month.

Frederick, Okla.—Plant, equipment and the stock in the alfalfa grinding mill operated by Bob Campbell was damaged by fire of unknown origin early July 3. The plant is being repaired.

Blackwell, Okla.—Reece McGee, of the Western Alfalfa Mills Co., has offered to build a dehydration mill in or near Blackwell if sufficient acreage is dedicated to the mill. If 2,000 acres are dedicated to the mill soon, the dehydration plant will be constructed to handle the 1940 crop and to this end a petition is being circulated among farmers.

Checotah, Okla.—The Holbird Feed & Fuel Co. has near completion a new feed mill on the Katy right-of-way which will double the present capacity of the plant. The structure is 85x50 ft. and provides 3,500 sq. ft. of floor space. It is equipped with special machinery for the manufacture of laying mash, dairy feed and all types of commercial feeds.

Muskogee, Okla.—The Atkins Mill & Elvtr. has been purchased from the Kimball Milling Co., of Fort Worth, Tex., by H. W. and J. D. Cole of Welch, father and son. The Coles will continue to operate the elevator here after the plant has been remodeled and renovated. They operate mills in Welch and Bluejacket and will use them as feeders for the local transit house.

Augusta (Carmen p. o.), Okla.—Fire believed to have started from defective electric wiring in the elevator head destroyed a grain elevator and about 7,000 bus. of wheat near here July 11. The grain was owned by Walcott-Lincoln, Inc., of Wellington, who operated the elevator, which was owned by A. W. Glasgow of Carmen. A second and larger elevator, also operated by Walcott-Lincoln, was endangered for a time but escaped damage.—J. H. G.

PACIFIC NORTHWEST

Touchet, Wash.—An elevator is being built on the George Gluck ranch near here.

Rosalia, Wash.—Rosalia Producers, Inc., has installed a new 20-ton Fairbanks Scale.

Grangeville, Ida.—The Denver Flour Mills is remodeling its mills in an expansion program.

Winona, Wash.—The Pacific Coast Elvtr. Co.'s new elevator will be completed in time for harvest.

Cheney, Wash.—The F. M. Martin Grain & Milling Co.'s plant and tanks are being given a coat of paint.

Bluestem, Wash.—The U. G. G.'s new elevator has been completed and is ready to receive the new wheat crop.

Kiona, Wash.—The Whitstran Trading Co. has leased the local warehouse again this year from the Horse Heaven country.

Colfax, Wash.—The Continental Grain Co. has moved its office to rooms on Main St. J. T. LaFollette is the company's local agent.

Lind, Wash.—The office of the Union Elvtr. and Warehouse Co. has been remodeled and air-conditioning equipment installed.

St. John, Wash.—St. John Grain Growers will tear down its warehouse at the east end of town, the ground needed for road right of way.

Spokane, Wash.—Burglars recently forced an entrance thru the back door of the Market Street Feed Co. and ransacked the office. Nothing was taken.

Seattle, Wash.—James McCormack of North Pacific Grain Growers, and formerly manager of the Seattle Grain Exchange, was married July 15 to Miss Bess M. Walker of Seattle.

Colfax, Wash.—The Colfax Grain Growers Ass'n has re-elected all its officers: R. L. Smith, pres.; Anson Patterson, vice pres., and R. P. Jones, sec'y-treas. and manager of the ass'n.—F. K. H.

Prosser, Wash.—E. W. Fry has constructed three wheat bins at his loading platform to handle bulk grain. The bins are equipped with blowers and three cars can be loaded simultaneously.

St. John, Wash.—Edgar W. Smith is constructing a 50,000-bu. storage elevator at the gravel pit siding, to be used for storage of products from his farm land. W. J. Morrell has the contract.

Springfield, Ore.—Harry Schrenk has ceased operations of his feed mill, located at the Oregon Fiber Flax Ass'n plant. The plant is being remodeled and will continue to make stock feed from the flax hulls.

Wilbur, Wash.—J. H. Llewellyn has been repairing and remodeling an old warehouse located west of his present establishment, to be used for grain storage. The building will hold about 75,000 bus. of bulk grain. A new scale has been installed there.

Seattle, Wash.—Thieves, who burglarized the Washington Feed Co.'s office recently, took a package of valuable papers from the safe—real estate contracts and income tax report, finding no money. A few days later the papers were returned to the company by mail.

Malad City, Ida.—The new Sperry's elevator is being rushed to completion. The bulk house capacity will be 60,000 bus. with an additional 20,000 bus. capacity in the sack house. All new modern equipment is being installed. Work is under the direction of the local manager, Elmer Loyd.

Asotin, Wash.—The bulk elevator of Lewiston Grain Growers, Inc., is being enlarged, work to be completed this month. The improvement will increase the elevator's storage capacity 140,000 bus. to a total capacity of 250,000 bus. The number of bins has been doubled and new machinery installed.

Spokane, Wash.—T. H. Hibbitt, veteran grain man, has been appointed manager of the Spokane Flour Milling Co., succeeding Karl Bumgardner who recently resigned. Mr. Hibbitt was with Boyd-Conlee for seven years and in 1917-18 was associated with the MacFarland Grain Co. in Colfax.

Spokane, Wash.—Operation of North Pacific Grain Growers, as a marketing agency for thousands of northwest farmers during the next three years, is assured, according to A. R. Shumway's announcement at the close of an executive board meeting. Members of the executive board include: Archie Camp, Lacrosse, Wash.; A. C. Linehan, Genesee, Ida., and Arthur Cox, Walla Walla. A. E. Sutton, Portland, manager of North Pacific, also attended the meeting, as did A. E. Scott, Spokane, secretary.—F. K. H.

Seattle, Wash.—Gordon T. Shaw was re-elected president of the Seattle Grain Exchange; H. B. Wyld, vice-pres.; A. G. Tuohy, sec'y and S. Ursic was re-appointed manager. Moritz Milburn, A. W. Anderson and H. L. McIntyre were elected trustees for three-year terms and to serve on the board of nine.

Helix, Ore.—The flour mill here has been leased to Kerr, Gifford & Co. who started operations early this month. S. E. Broigoitti, who purchased the mill last winter, operated it a short time on local business. Prior to that it had been idle for several years. Kerr, Gifford & Co. reopened the mill at The Dalles, Ore., this spring also.

Moody (Ruff p. o.), Wash.—The Odessa Trading Co. has purchased the grain business of Lenhart & Co. on the Milwaukee Railroad. The plant consists of an elevator and warehouse owned by the company and an elevator and warehouse under lease from the Milwaukee Grain Elvtr. Co. Con Lanhart, manager of the former company, will remain in charge.

Washtucna, Wash.—The Washtucna Grain Growers, Inc., has completed its new elevator and workmen now are building 12 bins adjoining the elevator which will have a capacity of about 42,000 bus.; giving a total storage capacity, with the elevator, of about 104,000 bus. of grain. An office will be built in the front of the warehouse and elevator and a new scale will be installed.

Enterprise, Ore.—A farmers grain co-operative ass'n is being organized here to handle grain and general merchandise. The idea is to enlarge the operations of the Wallowa County Grange Supply to handle grain. An agreement has been made to rent the properties of the Woolgrowers Warehouse Co. for five years with the option of buying for \$50,000, should the organization be effected.

Vancouver, Wash.—Vancouver's grain elevator, operated by Archer-Daniels-Midland Co., shattered all existing yearly records during the 1938-39 period by receiving and unloading 975,000 bus. of grain last month. With the addition of the June "handle," the total for the elevator year soared to 11,500,000 bus., the greatest amount of grain to pass thru the structure since its erection, W. D. Lehman, elevator supt., said.

Garfield, Wash.—The Garfield Union Warehouse Co. is building a bulk grain elevator near the company's old elevator on the Union Pacific Railroad which will have an 80,000-bu. capacity. The new elevator will have a foundation 24 x 30 ft., 20 inches thick of reinforced concrete. The structure will be of coast fir 2 x 6 cribbing and is to be completed this month. The combined total capacity of the company's sack and bulk facilities will be approximately 800,000 bus.

PENNSYLVANIA

Dushore, Pa.—The T. A. Keldar feed mill was destroyed by fire recently.

Stewartstown, Pa.—Geo. Brenner bought a "Eureka" Cyclone Dust Collector from the Sidney Grain Machry. Co.

Kammerer (Eightyfour p.o.), Pa.—The old Kammerer grist mill is being razed by the present owner, A. W. Morrison.

Lititz, Pa.—E. K. Zartman recently installed a Howes In-Suspension Scourer bought from the Sidney Grain Machry. Co.

Roaring Spring, Pa.—The Woodbury Milling Co. recently installed a modern molasses mixing machine, consisting of two large concrete storage tanks, placed underneath the mill floor, with a 12,000 gal. capacity and the mixing machine on the lower floor of the plant. A cracked corn cutter was installed also, a part of the modernization program that followed the installation of a 10,000-bu. grain elevator system. W. Herbert Hoover is owner and operator of the plant, assisted by Mrs. Hoover in the office.

SOUTH DAKOTA

Peever, S. D.—The Peever Grain Co. has made extensive improvements on its elevator.

Colton, S. D.—The Farmers Elvtr. Co. recently voted to reorganize as a co-operative concern.

Arlington, S. D.—The T. E. Ibberson Co. is painting Geo. P. Sexauer & Son's elevator, using aluminum paint.

Shippers' Certificate of Weight

for use in advising receivers of the amount and grade of grain loaded into a car. Especially adapted for filing claims for Loss of Weight in Transit. Each certificate gives: "Kind of scale used; Station; Car Number and Initials; Shipper's Name;—lbs. equal to—bus. of No. —; Date scales were tested and by whom; car thoroughly examined and found to be in good condition and properly sealed when delivered to the ————R. R. Co.; Seal Record, name and number, sides and ends; marked capacity of car; date; name of the weigher." On back is a form for recording the weight of each draught.

Printed and numbered in duplicate. Originals on Goldenrod Bond; duplicates on tough pink manila in two colors of ink. Well bound with heavy hinged pressboard covers. 75 originals, 75 duplicates and four sheets of carbon paper. Size 4½ x 4¾ inches. Weight 11 ozs.

Order No. 89 SWC.

Price \$1.00, plus postage

Grain & Feed Journals

CONSOLIDATED

332 So. La Salle St., Chicago

Railroad Claim Books

require little of your time for filing, and contain spaces for all the necessary information in the order which assure prompt attention on the part of the claim agent. They increase and hasten your return by helping you to prove your claims and by helping the claim agent to justify payment.

A is for Loss of Weight in Transit Claims.
B—Loss in Market Value Due to Delay in Transit.

C—Loss in Quality Due to Delay in Transit.
D—Loss in Market Value Due to Delay in Furnishing Cars.

E—Overcharge in Freight or Weight.

These claim blanks are printed on bond paper, bound in book form, each book containing 100 originals and 100 duplicates, a two-page index, instructions and summary showing just which claims have not been paid, and four sheets of carbon.

The five forms are well bound in three books, as follows:

411-A contains 100 sets all Form A. Price, \$2.00. Weight 8 lbs.

411-E contains 100 sets all Form E. Price, \$2.00.

411-5 contains 60 sets Form A, 10 Form B, 10 Form C, 10 Form D and 10 Form E. Price, \$2.00.

Grain & Feed Journals

CONSOLIDATED

332 South La Salle St. Chicago, Ill.

Hecla, S. D.—C. C. Query of Orient is the new manager at the Equity Elevator.

Miller, S. D.—The Farmers Elevator Co. reported a small loss sustained at its elevator July 4 from high winds.

Putney, S. D.—Mr. Balgeman of Bristol will manage the Farmers Elevator Co. elevator, succeeding Emil Nelson, resigned.

Vivian, S. D.—The State elevator concerns of Rapid City and Belle Fourche are erecting a new 30,000-bu. capacity grain elevator here.

Howard, S. D.—The Callan Grain & Seed Co. has purchased the elevator formerly owned by the late Leo Brewer and is operating the house with Herman Briggs in charge.

Frederick, S. D.—C. C. Query of Orient is new manager of the Frederick Equity Exchange elevator, succeeding Mr. Peterson who resigned to return to his own business at Barnard.

Bristol, S. D.—L. W. Balgeman, for the past two years manager of the Farmers Elevator, has been transferred to Putney, S. D. Fred Gerberding, of South Shore, has succeeded him.

Gary, S. D.—Henry Goolirsch of Wabasso, Minn., recently purchased the Gary and Moritz elevators from Emil Hogle who has owned them for the last 12 years, taking immediate possession.

Bruce, S. D.—Ed Anderson of Watson, Minn., has been appointed manager of the newly organized Farmers Grain & Coal Elevator Co. A new scale has been installed at the company's elevator.

Lyons, S. D.—Emil Nelson, of Putney, has purchased the local elevator and, with his son, Charles, will operate it. He was formerly manager of the Putney Farmers Elevator Co. plant for 19 years.

Winner, S. D.—The Tripp County Co-operative Ass'n, a new organization, has leased the Farmers elevator. Ray Jelinek is the manager and Harold Brown his assistant. Officers are B. F. Carper, pres., J. C. Brown, sec'y-treas.

Hartford, S. D.—The grain elevator built in 1890 by the Peavey Grain Co., and used until 1914, when the Farmers Elevator Co. purchased it, has been moved to a new site beside the old Farmers elevator. The structure had not been used for several years.

Tripp, S. D.—Leonard Hohn of Dimock has been made manager of the A. C. Cohrt Elevator here. The site of the elevator fire last fall is being cleared of debris and an elevator is to be moved here from Plum, south of Scotland. Mr. Hohn recently had been employed as grain buyer for A. A. Haage in Dimock.

Gayville, S. D.—I. G. Corey, operator of the local elevator, was critically injured July 11 when the belt flew off the engine near which he was working, knocked him down and as the wheel continued to turn, the belt beat him into insensibility. He was rushed to the Sacred Heart Hospital at Yankton where he later regained consciousness. A concussion and possible skull fracture resulted.

Lennox, S. D.—Cargill, Inc., is dismantling two of the present elevators operated by the Aulwes Grain & Feed Co., one of which is the former Bradshaw elevator located on the Milwaukee tracks, the other the former Aulwes elevator in the northwest edge of town on the Great Northern tracks, and a new elevator will be erected on the site of the old Bradshaw structure. The elevator will have a 30,000-bu. capacity and will include in addition a feed milling and processing plant. The T. E. Ibberson Co. has the contract.

SOUTHEAST

Samson, Ala.—The E. S. Parish feed mill was damaged by fire early July 10.

Ardmore (Ardmore, Tenn., p.o.), Ala.—The Ardmore Grain Co.'s warehouse was destroyed by fire the night of June 28.

Wilmington, Del.—The Decatur Soy Products Co. has been granted a charter; incorporators, L. E. Gray, L. H. Herman, Walter Lenz.

Rock Hill, S. C.—The name of the Economy Feed & Milling Co. has been changed to the Farmers Feed & Milling Co. A. Bynum Poe is manager.

Richmond, Va.—The Cream of Wheat Corp., a Delaware corporation, with principal office here, has been incorporated in Virginia; capital, \$1,200,000; to deal in cereal products.

Montgomery, Ala.—Moreno-McCord Co. recently purchased a new combined Sheller and Cleaner from the Sidney Grain Machinery Co.

Atlanta, Ga.—Walter R. Davis, inspector of hay and grain for the Atlanta Commercial Exchange, retired July 1 at the age of 70. He had been with the Atlanta Exchange for 21 years and previously was connected with the Savannah Board of Trade.

Pensacola, Fla.—The J. G. Pace feed mill, two stories high and 40 x 80 ft., equipped to make a full line of poultry and animal feeds as well as sweet feeds, cornmeal and grits, has been completed and is now in full operation in the Chumuckla section near this city.

Statesville, N. C.—The new feed mill known as Co-operative Mills, Inc., was opened here July 14. Its daily capacity is 240 tons. The plant is owned jointly by the Farmers Co-operative Exchange, Raleigh, N. C., and the Southern States Co-operative, Richmond, Va. All feeds will be mixed under formulas.

TENNESSEE

Chattanooga, Tenn.—The Mountain City Mill Co., Inc., has filed an application for a permit to construct a grain unloading terminal on the left bank of the Tennessee River.

Morristown, Tenn.—Robert O. Russell and N. B. Harrell have bot the Russell Milling Co. mill. Mr. Russell will manage the plant. Another story will be added to the warehouse and a 15-ton feed mill will be installed there. Mr. Harrell will be the firm's traveling salesman.

TEXAS

Waco, Tex.—The Clement Grain Co. is installing a new Hall Signaling Grain Distributor in its plant.

Carrollton, Tex.—The Carrollton Feed Mills has installed a new scale and completed the building of a new office.

Adrian, Tex.—A. F. Roberts of A. F. Roberts Const. Co. has just completed a new elevator on his 3,000 acre "Dusty Dude Ranch," near here.

Houston, Tex.—The Houston Milling Co. has awarded contract for erection of its \$12,000 warehouse to J. B. Hawthorne. The building will be of concrete and hollow tile construction.

Gonzales, Tex.—Fred A. Scheske has purchased the Kopecky Grain Co., taking charge June 27. He will be assisted in the business by Fred Scheske, Jr. E. V. Kopecky will locate at Flatonia.

WISCONSIN

Madison, Wis.—The A. F. Hoffman Feed Co. storage shed and grain elevator was destroyed by fire July 14 with a loss estimated at \$10,000.—H. C. B.

Superior, Wis.—The Daisy Mill in East End Superior will be ready for milling operations about Aug. 15, officials of the King Midas Milling Co. announced.

Antigo, Wis.—Antigo Flour & Feed Co. has been incorporated; capital: 500 shares par \$100 each. Incorporators: Virgil Hunter, Jac. Hunter, Thomas Hunter.

Johnsonville, Wis.—Fire July 14 destroyed the Edgar Laack grocery and mill here with a loss estimated at \$30,000. The mill was operated by Otto P. Schultz. Mr. Laack said he would rebuild.—H. C. B.

Spring Valley, Wis.—The Valley Elevator Co. has repaired the plant machinery, the elevator being closed for two weeks while the work was in progress. Chutes, bins and spouts will be repaired also before fall.

Weyauwega, Wis.—The city council voted July 17 to sell the former Weyauwega Mill, warehouses and office to A. L. Nichols of Nichol, Wis., for \$1,300. Mr. Nichols plans to operate the plant as a soy bean mill.—H. C. B.

Brussels, Wis.—Harry LeRoy is building a grain elevator and warehouse. A part of his present building, which was moved to make way for the new structure, will be used for a lumber shed, the other part to house the feed mill.

Ellsworth, Wis.—Lyle Keller is erecting a building on Chestnut St. to house his new feed grinding equipment. It will be of concrete block construction, 28x60 ft. Frank Johnson has the contract. Mr. Keller conducts a cream and produce station here.

Superior, Wis.—Three steel tanks at the Spencer Kellogg & Sons, linseed oil manufacturers plant, were blown down during a recent violent wind, rain and hail storm. They had been used to store flaxseed and were empty at the time. Each tank had a capacity of about 38,000 bus.—F. G. C.

Berlin, Wis.—New grain cleaning equipment has been installed at the Old Grist mill, owned by Dahlke, Giese & Walker Co., which is undergoing extensive improvements and alterations. Larger elevators have been installed and a new dump. Coal sheds have been constructed to replace those recently damaged by fire.

WYOMING

Sundance, Wyo.—L. A. Wilkerson recently purchased the Butler Flour Mill.

The Consolidated Paint & Varnish Corporation, Cleveland, O., has agreed with the Federal Trade Commission to cease misrepresenting that Goodyear Liquid Roof Cement or Coating is a "new" method for weather proofing; that it "instantly stops any leaks;" that it is not affected by heat or cold; resists vibration; can be applied over any surface; gives equally satisfactory results on all kinds of roofs, or adheres tightly to any kind of roofing material.

A New Fumigant

By RAY HUTSON, Head Department of Entomology, Michigan State College

We have been using propylene dichloride in Michigan for several years as a grain fumigant. I may say that we make no claims regarding its newness.

As a matter of fact, the first mention of this material as a weevil fumigant is contained in the United States Department of Agriculture Bulletin No. 1313, published in 1925. On page 13 of this bulletin you will find that certain materials gave 100% mortality of grain weevils. At that time the material sold for \$1.35 per pound. Subsequently, the cost of production was reduced, due to certain processes having to do with the manufacture of tetra ethyl lead from which propylene dichloride is obtained as a by-product in large quantities. The price immediately came down to approximately six cents a pound wholesale.

As I remember, the above condition obtained during 1931 or '32 when large amounts of grain were held on farms. As you well know, whenever large quantities of grain are held on farms fumigation becomes necessary. Carbon disulphide has a fire hazard which the Michigan Millers Mutual considers too high. Inasmuch as the insurance on many farms here in Michigan is carried by this company, a great demand for a non-inflammable fumigant arose.

The result was that various mixtures of propylene dichloride, together with carbon tetrachloride to reduce the very low fire hazard still further, were tried out. The net result was that a mixture of 25% carbon tetrachloride and propylene dichloride was found to be effective against the commonly found insects occurring in granaries of Michigan farms.

This fumigant is entirely acceptable to the Michigan Millers insurance group and, when used at the rate of 2 pounds to the hundred cubic feet of space, or 100 bushels of grain, in a tight container has given excellent satisfaction.

Briefly, this is the story of propylene dichloride. It is not as volatile as carbon disulphide and the chief reason for its use here in Michigan is that it satisfies the insurance requirements of most farms. The material is manufactured largely by the Dow Chemical Co., which has its plant at Midland, Michigan, and is very strongly represented in the jobbing field. The result has been that the material is available over most of the area where it would be commonly used.

Supply Trade

Peoria, Ill.—H. G. Moore, former vice-pres. and sales manager of the Keystone Steel & Wire Co., died recently.

Kokomo, Ind.—Frank W. Tufts, advertising and sales promotion manager of the Continental Steel Corp., died recently.

North Platte, Neb.—We have quite a few nice jobs now and the grain men seem to be very much encouraged over the fine crop prospects in western Nebraska.—W. H. Cramer.

Minneapolis, Minn.—The Superior Separator Co. has been appointed sales representative for the Anglo-American Mill Co. in North and South Dakota, Minnesota, Montana and Wyoming.

Good words fall into disrepute thru overwork. "Guarantee" is one that has suffered. It often means nothing at all—like the "guaranteed, money back if not satisfied" parachutes.

Chicago, Ill.—Fairbanks, Morse & Co. has been awarded contract for the propulsion machinery for three new submarines. In addition to these three boats the company has furnished power units for five other submarines now under construction.

Minneapolis, Minn.—Money in Grain, is cleverly portrayed in a recent circular issued by Hart-Carter Co., which gives interesting facts relating to that company's Disc-Cylinder and Uni-Flow machines. Grain elevator operators should ask for this circular as it contains information all should know.

Indianapolis, Ind.—Frank S. O'Neil has been appointed general manager of the local plants of the Link-Belt Co. Mr. O'Neil joined the organization 33 years ago, coming here 10 years ago where he successively served as asst. supt. in charge of malleable iron chain assembly, supt. of the Ewart plant, and assistant general manager of both Ewart and Dodge plants.

Pittsburgh, Pa.—Superior Scale Co. of Pittsburgh is the name of a wholly owned subsidiary of the Superior Scale Co. of Delavan, Ill., which will open here Aug. 1 under the management of H. O. Watson, who was formerly associated with the Howe Scale Co., and who is sec'y of the Pittsburgh Division of the National Scalesmen's Ass'n, and a well known figure in the scale trade thru the east.

New York, N. Y., June 29.—Sharp advances in the value of new orders, shipments and unfilled orders during May, as reported by a cross-section of American industry comprising 153 large and small manufacturing concerns, marked a virtual recovery from the declines suffered in April, according to a confidential survey made by the Division of Industrial Economics of the National Industrial Conference Board.

Medina, N. Y.—Under fire from the Federal Trade Commission, Russell J. Waldo, as North American Editors Service, will discontinue misrepresenting that his service was based on 12,000 questionnaires sent out or that his report service was conducted at the instance of eight advertising agencies and that publications have gained or lost advertising lineage according to whether they have purchased or used his Readers' Preference Reports.

Milwaukee, Wis.—Walter Geist was appointed vice-president of Allis-Chalmers Mfg. Co. recently. Mr. Geist entered the employ of the company in 1909 as errand boy in the saw mill engineering department. From that position he advanced thru various positions and departments from which he derived a broad knowledge and experience of the various prod-

ucts of the company. He originated the idea of the multiple V-belt drive principle of power transmission known as the Texrope drive.

Springfield, Mass., June 12.—Trade publications and exhibitions are receiving increasing attention from industrial advertisers, according to a survey by the industrial department of the Eastern States Exposition. The trade publications with their specialized appeal and industrial shows held in connection with all-purpose agricultural and industrial exhibitions reach both the limited market as well as the great consumer field. Reservations already received for the 23rd annual Eastern States Exposition, which annually stages the largest general industrial exhibition held in the United States, have exceeded any previous year.

W. Littlejohn Philip, widely known engineer and recognized as one of the outstanding European authorities on mechanical grain handling, recently announced his retirement as managing director of Spencer (Melksham) Ltd., after 53 years' connection with the company. Mr. Philip has acted as consulting engineer for the building of a large number of grain elevators in England and other countries. He was selected as consulting engineer by the South African government in the design and construction of the country and terminal elevators built there in the past several years. Mr. Philip will retire to his new home in Bournemouth, and his legion of friends in all parts of the globe wish him many happy years.

Antiquated Demurrage Rules

Fort Worth, Tex.—The present demurrage rules are completely antiquated and unjust. These rules were initiated when the wheat harvest required from three to five months for completion, and at that time no elevator was seriously taxed as at present; but now with the combines being used on fully 80 per cent of the wheat acreage, the crop moves in three weeks or less, and the elevators are called upon to unload beyond any capacity or possibility. These demurrage rules should be changed to eliminate demurrage on any cars in excess of the elevator's unloading capacity, for it is certainly not our fault nor our wish or desire that the wheat crop move in the volume that it does, so why should we be penalized to the extent of paying high demurrage, as well as being placed on constructive demurrage rules? —G. E. Blewett, vice pres. and gen. mgr., Fort Worth Elevators & Warehousing Co.

Heavy Lake Shipments

Fort William, Ont.—The Lake Shippers Clearance Ass'n reports that lake shipments of grain from the opening of navigation this spring until July 12 have been considerably more than double those of last season for the like period. Total shipments this year have reached 71,032,500 bushels, of all grains, while for the same months last year they were only 27,384,340. Of this total wheat accounted for 57,692,183 bushels in 1939, and for 20,566,886 in 1938.

The number of boats that have carried this grain down the lakes this year was 310 Canadian boats to Canadian ports, 14 United States boats to United States ports and 33 Canadian boats to United States ports, which compared with last season's record of 168 Canadian boats to Canadian ports, five United States boats to United States ports, and only two Canadian boats to United States ports. This is a total of 357 vessel clearances with grain this year, as against 175 a year ago.

A 3-cent additional charge for insurance on wheat per bushel has been recommended by a com'te of the Pacific Northwest Grain Dealers Ass'n, to meet the requirement of the C.C.C. for an insured warehouse receipt.

Grain Carriers

Of the railroad net earnings of \$1,415,000,000 during the five years 1935-39, the railroads were allowed to keep 54 per cent, while the tax collectors took 46 per cent.

Wm. J. Patterson of North Dakota has been nominated by the president for membership in the Interstate Commerce Commission, to succeed B. H. Meyer.

Grain and grain products were loaded into 53,456 cars during the week ending July 8, against 56,320 cars during the like week of 1938, as reported by the Ass'n of American Railroads.

Warsaw, Ill.—The T., P. & W. R. R. Co. suit against the Farmers Grain & Supply Co. to prevent the erection of a chute over the tracks to load river barges was heard recently by Judge Burton A. Roeth of the circuit court.

St. Louis, Mo.—Trucks from Indiana, Illinois, Ohio and Wisconsin are being stopped here at the river bridges and the drivers placed under arrest for operating in the state without Missouri Public Service Commission certificates.

Representatives of the farmers and Nebraska grain dealers, as well as the U. S. Dept. of Agriculture and the Nebraska Railroad Commission participated in the argument July 19 before the Interstate Commerce Commission on a readjustment of grain rates from western Nebraska and eastern Colorado to Omaha.

Argument in the grain door case was heard by the Interstate Commerce Commission July 6. H. J. Campbell appeared for the Chicago Board of Trade and argued that compensation was included in the freight rate. Examiner Bardwell had agreed. The case involves the charge for installing, furnishing and reclaiming grain doors in the Chicago switching district.

Altho grain rates from Colorado and western Nebraska have been held by the Interstate Commerce Commission to be not unreasonable, the Commission has permitted Sec'y of Agriculture Wallace to intervene. Wallace holds that producers were vitally affected by the rates to Omaha and Council Bluffs. The complaint by the Sioux City Grain Exchange is No. 27,763.

The draft for a new transportation act has been agreed upon by the com'te of the House. Water carriers would be regulated, interstate, on the Great Lakes and Coastwise. Common carriers by water will be required to post rates and operate under a certificate of convenience and necessity. The Commission will have power to fix maximum and minimum rates. Land grant reduced rates on government freight would be eliminated. The time limit for recovery of overcharges is reduced from three to two years.

New Type of Grain Barge

Cargill, Inc., is trying out a new type of grain barge on the Oswego-Albany canal.

The barge is in four separate parts held together by chains, and is 236 ft. long, 42 ft., 6 ins. beam and 12 ft. in depth, drawing 12 feet of water with 100,000 bus of grain. Two bulkheads in each section form three compartments. The midship sections are identical and can be left out if bow and stern are chained together. Steel is the material of construction.

Present wooden barges carry 20,000 bus. and slow up the passage of a tow of five thru locks. With the new barge the grain can be moved at lower cost.

Field Seeds

Devils Lake, N. D.—J. B. Peterson has taken over the management of the Dakota Seed & Fuel Co.

Rochelle, Ill.—Allen B. Willets, of Lake Bluff, has been employed as sales manager for the Lazier Seed Co.

Marengo, Ia.—A seed corn processing plant is being erected by the Pioneer Hi-Bred Corn Co.

Astoria, Ill.—The Mummert Bell Seed Co. has been incorporated by Devere Mummert, C. A. Bell, and L. P. Pfister.

International Falls, Minn.—A seed buying station in charge of Chas. Habstritt has been opened here by the Habstritt Seed House of Roseau.

Durant, Ia.—The addition being built to the building of the Pioneer Hi-Bred Corn Co. will increase the capacity for drying to 16,000 bus.

Pella, Ia.—A large building has been leased by the National Hybrid Corn Co. to be converted into a seed corn processing plant of 30,000 bus. capacity.

Fairfield, Wash.—A warehouse for storage of peas is being erected on land purchased for that purpose and adjoining its cleaning plant, by the Adams Seed Co.

Ellensburg, Wash.—The roundhouse of the railroad company leased by the Moscow Seed Co., of Moscow, Idaho, was damaged to the extent of \$12,000 by fire June 27.

Howard, S. D.—The elevator of Leo Brewet, deceased, has been purchased by the Callan Grain & Seed Co., which has retained Herman Wriggs as manager.

Sacramento, Cal.—Com'ites of the Pacific States Seed Ass'n and the California Hay, Grain & Feed Dealers Ass'n are working on the creation of a seed division to unify seed policies.

Roseau, Minn.—The Northern Seed & Grain Co. is building an addition, 24x50, to its warehouse, for grass seed. Additional cleaning machinery will be installed in the main elevator.

Farmers troubled with stinking smut in their wheat this year can avoid it next year by treating their seed wheat with new improved ceresan; it costs only about five cents an acre for material.

Fremont, O.—Robert Fangboner has purchased the interest of Wm. E. Wolfe, general manager, who will retire from the Fangboner Seed Co. after 40 years in the grain and seed business, 20 with the seed company.

Purdue, Ind.—Hybrid corn research will be conducted by Clifford V. Heyne, recent University of Nebraska graduate, as assistant in the botany department of Purdue University, under a grant from the agricultural alumni seed improvement ass'n.

St. Paul, Minn.—From our observations and those of a number of prominent hybrid seed growers, we believe that about 25 to 30 per cent of the Minnesota corn acreage this spring was planted with hybrid seed corn.—Carl Borgeson, division of agronomy.

Madison, Wis.—Dr. O. S. Aamodt, chairman of the Wisconsin Seed and Weed Council, has resigned and been succeeded by Dr. Henry Lunz. Dr. Aamodt has removed to Washington to head the division of forage crops and diseases in the U. S. Dept. of Agriculture.

Cincinnati, O.—W. H. Crossland was granted a reversal of the lower court decision recently in his suit against the Kentucky Blue Grass Seed Growers Co-operative Ass'n for damages for breach of his contract to market seed for the Ass'n. Damages will be assessed at a new trial.

Vernon, Tex.—Wilbarger County promises to be a good future source of dry land alfalfa seed of the Southwestern common variety. It is the only one of the numerous counties in the state applying for certification of its seed. The acreage planted is 10,000 and 50,000 acres are adapted.

Princeton, Ill.—Two trucks driven too close to the center line of the highway scraped together, killing four of the 15 young men in one truck leased by the Pioneer Hi-Bred Corn Co. to carry them to Van Orin to detassel corn, July 19. The two riders in the other truck were uninjured.

Milford, Ill.—Walter J. Munn, plant breeder for Crow's Hybrid Corn Co., has received seven samples of inbred corn grown in Australia from W. W. Bryan, plant breeder for the Queensland High School and Experiment Station, who was in the United States two years ago and spent considerable time studying corn breeding.

Mt. Vernon, Ind.—Inferior quality of this year's wheat crop and the presence of many weeds due to the heavy rainfall, will make seed wheat cleaning the most extensive program of the kind ever undertaken locally, it has been announced by the Posey County Farm Bureau. The cleaners, supplied by the Fuhrer-Ford Milling Co. and the Home Mill & Grain Co., will be operated by the association.—W. B. C.

St. John, Wash.—The St. John Crested Wheat Grass Seed Co., a new institution, is rebuilding the Heglar Implement house and installing machinery for cleaning crested wheat grass seed. The company is under contract with the Certified Seed Co. of Spokane to clean all seed from its extensive contracted crested wheat grass acreage in the Inland Empire. Will R. Heglar and John R. Mulkey are officers.—F. K. H.

San Jose, Ill.—Rapid progress is being made on construction of an 80x40 ft., two-story addition to the 150x80 ft. seed warehouse of the Kelly Seed & Hardware Co. on the C. & A. railroad. Ora Long is in charge of building this frame, iron-clad addition, and of construction of a 60x142 ft. hybrid seed corn drying and storage plant for which the foundation has already been laid. W. G. Kelly says the drying plant will have capacity to handle between 125,000 and 150,000 bus. of hybrid seed corn in a season, and he expects to have it completed in time to handle the crop from 728 acres of hybrid seed corn he has growing on his own farms, and on contracted acreage.

Schrock an Outstanding Kafir

By R. E. KARPEN, Texas Agricultural Experiment Station.

Experiments conducted at the Angleton station from 1928 thru 1933, in which six varieties of grain sorghum were compared with each other and with Tuxpan corn, showed Schrock kafir to be the outstanding variety of grain sorghum. During these years Schrock yielded from 14 to 36 bushels of grain to the acre and averaged 25 bushels to the acre. Darso was the next most promising variety but averaged only 14 bushels to the acre, as there was more bird damage and apparently more damage from sorghum midge with Darso. Dwarf yellow milo and Texas Blackhul kafir both produced very low yields of grain.

Hegari produced some good yields of grain but is a white-seeded variety that is attractive to birds. Unless a large acreage can be planted and is harvested and cared for promptly, the loss from birds is very large.

Schrock kafir and Darso are both hybrid varieties, having sweet sorghum or cane as one of their parents, and they have inherited the brown colored seed coat and the bitter taste found in cane seed. This makes them unattractive to birds.

Tannin in the seed coat makes the grain less palatable to live stock, also, but they learn to eat it readily and feeding tests with these two varieties indicate that the grain is nutritious and that practically as good gains are made as when other grain sorghums are fed.

Schrock kafir selection and breeding work was begun at the Angleton Station in 1934 by Superintendent R. H. Stansel. From a large number of headrow selections planted the first year, many promising strains of both grain and forage types were found. The better ones have been propagated each year and grown in comparison with each other and with the original Schrock kafir. Mr. Stansel is now increasing seed of the best ones for distribution to interested growers. There are tall and dwarf strains representing good types for forage to be used as bundle feed and also types to be headed for the grain.

Some of the grain types have large, open heads with long seed branches which produce large grain yields and are less susceptible to mold and bird damage than the compact type of head. Altho damage from the sorghum midge can be expected in certain seasons favorable to this insect, Schrock kafir has not suffered extensively from such damage at Angleton.

These new strains developed from single head selections are more able to escape the midge unless a large population of the insect has previously multiplied on volunteer Johnson grass or some other field of sorghum.

In addition to being a high grain producing sorghum, Schrock kafir also has good forage qualities. It is leafy, has a sweet stalk, and makes a good yield of bundle feed. Schrock makes first-class forage that can be fed all winter if cut, cured and properly stored in the barn or stack. The whole crop may also be cut and placed in a trench silo.

A grain yield of 25 bushels to the acre, plus two to three tons of cured forage, makes quite a favorable total acre feed production. The feeding value of this amount of forage is just about equal to the grain produced on an acre. Since more live stock is being produced on farms, the sorghums in the Gulf Coast are increasing in popularity and Schrock is a profitable variety to grow.

The Oregon Flax Fiber Ass'n's plant at Springfield, Ore., is being managed this season by Peter Ritthaler. It is expected the 20 farmers growing flax for the Ass'n will deliver 750 tons, which is more than the mill can handle during August and September, the two months of operation, leaving some flax to be carried over.

Directory

Grass & Field Seed Dealers

CRAWFORDSVILLE, IND.

Crabbs, Reynolds, Taylor Co., clover, timothy.

PAULDING, O.

Stoller's Seed House, wholesale field seeds.

ST. LOUIS, MO.

Mangelsdorf & Bro., Ed. F., wholesale field seeds.

SIOUX CITY, IOWA

Michael-Leonard Seed Co., seed merchants.

Farm Seed Group Meets

The midsummer meeting of the Farm Seed Group of the American Seed Trade Ass'n was held July 21 in the Palmer House, Chicago, with about 40 present, Floyd Brown, chairman, Chicago, presiding.

L. A. MOORE, of the seed department of the Illinois Department of Agriculture, told of the proportion of seed handled thru the regular seed channels, 12 per cent of the grain seeds being handled thru the regular trade and less than 50 per cent of the small seeds.

In most states, Mr. Moore said, farmers are exempt from seed laws, whereas they should be prevented from nullifying state seed laws.

W. A. WHEELER of the U. S. Dept. of Agriculture, told of the Coffee bill to regulate the seed trade.

DR. PORTER of Ames, Ia., reported on his research on seed testing.

Rust-Resistant Wheat and Oats Developed

By P. C. MANGELSDORF, Agronomist, Texas Agricultural Experiment Station

About a month ago I had the unusual and gratifying experience of seeing a dream almost on the verge of coming true. At Texas Substation No. 3, at Angleton, late in April, I saw strains of wheat promising yields of 25 to 30 bus. per acre, strains of oats looking good for 50 to 60 bus.; all were completely free of leaf rust and stem rust in a region where wheat and oats have never been grown before as a commercial grain crop because of the prevalence of these diseases.

Wheat, oats and other small grains are especially adapted to deep, heavy soils and where such soils occur the farmer is usually found to be growing an appreciable acreage of small grains along with the other crops. This is true almost throughout the United States except in the Gulf Coast region of South Texas. This region possesses several million acres of deep, black, heavy soil which should from the standpoint of physical texture and chemical composition, be well suited for grain production. The fact that rice is already being successfully grown where irrigation water is available is ample evidence that the soil is suitable for small grains. Why is practically no grain grown in this vast region of fertile soils and abundant rainfall?

The answer is *rust*. The warm winter weather in South Texas permits the rusts, both leaf rust and stem rust, to get an early start, either from spores of these diseases that have survived on native grasses, or from wind-borne spores from the northern spring wheat states, carried back to the south on the wings of the norther. In any case rust appears early in South Texas and increases rapidly and in such epidemic proportions that wheat can no longer survive in a losing battle with the disease.

Some years ago agronomists of the Texas Experiment Station conceived what then appeared to be a fantastic scheme of breeding new varieties of wheat and oats so resistant to rust that they could be grown even in the Gulf Coast. Selections of wheat resistant to leaf rust had already been isolated from the Mediterranean variety at Texas Substation No. 6 at Denton. Previously, E. S. McFadden of South Dakota had produced, by crossing the famous Marquis wheat with the rust resistant emmer

from Russia, a new spring wheat which he named Hope. This new wheat was highly resistant to almost all forms of rust. By hybridizing our Texas Mediterranean wheat with the rust resistant Hope we expected to obtain new combinations which were resistant to leaf rust and stem rust. This has proved to be the case. Furthermore, these new wheats have made yields in the Gulf Coast region which have never before been approached by the old standard commercial varieties. At Victoria in 1937, for example, one of the new strains made 26.5 bus. per acre while Denton wheat, one of the best commercial varieties in North Texas, made 5.5 bus. At College Station the previous year one of the more promising rust resistant strains made more than 30 bus. per acre while its two parents, Hope and Mediterranean, produced no grain whatever. Hope wheat was wiped out by a freeze. Mediterranean was a complete loss as the result of stem rust.

Some of the better strains are now being increased and in a few more years seed will be available for South Texas farmers. Wheat in the Gulf Coast region should probably be considered primarily as a feed crop. It furnishes an abundance of excellent winter pasture at a time when the native grasses are dormant. Wheat hay produced by cutting when the grain is in the dough stage is also an excellent feed and is used extensively in Oregon and Washington as the sole feed for work stock. However, if the export market for wheat becomes active again, the Gulf Coast region, with its large acreages of level land well suited to large-scale operation, and its proximity to several ports, would be in an ideal position to develop a large-scale grain enterprise if suitable varieties are available. The differential in freight rates alone would be an important factor in profitable production.

What has been done with wheat is also being done with oats. For years no varieties resistant to leaf or crown rust of oats were available and no progress could be made. The plant breeder can create nothing new. He can do no more than to combine characteristics already existent in present varieties, and a world-wide search for rust resistant oats by agronomists of the United States Department of Agriculture led to the discovery in South America of several varieties which are almost immune to leaf rust. One of these, known as Victoria, has been especially promising because it is resistant not only to leaf rust but to loose smut as well. We have crossed Victoria with Nortex, one of our best Texas oat varieties, and from the hybrids we have obtained many new segregates which are resistant not only to leaf rust but also to smut. Some of these new selections are making yields considerably higher than those produced by the old standard commercial varieties.

Vernalization of Oats

Vernalization of two winter oats, three intermediate, and one spring variety, 1933-37, hastened the heading date from 2 to 10 days in varieties with a low temperature requirement and shortened the period from seeding to heading an average of 6 days. Spring oats showed no earlier heading, Iogold being retarded in certain years. Yields of Frazier, Nortex, and Fulghum (C. I. 2499) averaged higher from vernalized than from untreated seed. The greatest increase occurred in Nortex, which averaged over 20 per cent higher. Lee and Fulghum (C. I. 708) and the spring Iogold showed lower yields after vernalization. The 4-yr. average yield from untreated Iogold was the same as the average of the other five oats after

vernalization. Spring oats planted early out-yielded all vernalized oats, and fall-sown oats yielded about 20 per cent more grain than the highest yielding vernalized variety. The treatment greatly reduced the occurrence of oat smut, according to J. W. Taylor and F. A. Coffman, in the Jour. Amer. Soc. Agron.

Wheats Favored by Nebraska Farmers

A questionnaire sent to 10,000 farmers by the Nebraska Grain Improvement Ass'n and other agencies co-operating, elicited the following information:

Iobred, an Iowa variety with rust resistance, was popular in eastern Nebraska among farmers last year. The reports turned in by farmers give it a higher yield than most hard wheats, which accounts for its popularity.

While only a few acres of Chiefkan were reported it evidently gave exceptionally high yields wherever grown. This wheat is apt to become very popular with farmers and increase rapidly in spite of the fact that the milling trade doesn't like its bread making qualities.

Two soft wheats, Fulcaster also known as Peck or One-Half Bushel Wheat, and Clarkan, did well in southeast Nebraska last year. If the farmers are going to grow a soft wheat in southeast Nebraska, the Experiment Station recommends Clarkan. While only 94 acres were reported in the survey those acres averaged 33 bushels per acre.

Kawvale, a semi-soft wheat from Kansas, also gave good yields in southeast Nebraska last year. Blackhull, another Kansas wheat, did well in western Nebraska. Before planting large acreages to this variety farmers should be fully aware of its lack of winter hardiness. Many fields of Blackhull showed a considerable amount of winter killing this spring.

Dixon wheat or Humpback, an undesirable spring wheat for milling, grown in a limited area around Alliance has received more unfavorable comments from the trade than any other wheat grown in the state. Only 200 acres were reported but these 200 acres yielded an average of 18.2 bus. per acre. This average may be a little too high. Nevertheless it helps substantially the reason farmers give for growing it, the main one being "its yielding ability."

Always Buyers
FARM SEEDS
All kinds—CLOVERS, ALFALFA, TIMOTHY, etc.
Send samples for bids
DAVENPORT SEED CO.
DAVENPORT, IA.

We are in the market for
all kinds of
FARM SEEDS
Send samples for highest bid
to our nearest office:
SIOUX CITY, IA. IOWA CITY, IA.
NORFOLK, NEB. MANKATO, MINN.
SIOUX FALLS, S. D. CARROLL, IA.
BILLINGS, MONT.
MICHAEL-LEONARD SEED CO.
formerly Sioux City Seed Co.

CRABBS REYNOLDS TAYLOR CO.
CRAWFORDSVILLE, IND.
GRAIN
Clover and Timothy Seeds
Get in Touch With Us

ED. F. MANGELSDORF & BRO.
Buyers and sellers of
Sweet Clover, Alfalfa, Lespedeza, Clovers, Timothy, Grasses, Fodder, Seeds, Sudan Grass, Soy Beans, Cow Peas
St. Louis, Missouri

Maintaining Quality of Soft Wheat

By O. F. KELLEY, Boonville, Mo., before Missouri Grain & Feed Ass'n.

We trust you to ship us good type milling wheat when we buy, but occasionally the car you think is o.k. arrives with a mixture of hard wheat insufficient to knock it to mixed, or with a mixture of nondescript soft wheat that grades, and all we can do is accept it, and say nothing but watch that shipper and if too frequently repeated, our bids drop or disappear at that station.

I understand the Iglehart mill at Evansville, Ind., pays a 3c premium for wheat meeting its specifications from eight southwestern Indiana counties. Mills requiring good soft wheat over there have been buying the average run of Missouri wheat also. The average run of Indiana wheat sells about 5c discount under Missouri wheat basis the Ohio River, so Missouri has been getting a better premium, because our wheat has been maintained on a quality variety basis due to the good efforts of the Missouri College of Agriculture.

We fear many Missouri farmers are fondly eyeing varieties of the hard wheat family, because they escaped serious rust infection the past two years. If these undesirable varieties get a foothold and grain dealers permit the stuff to mix with good soft wheat in their elevators, Missouri will find her premium wheat disappearing.

Harvest Queen and Michigan Wonder varieties you are all familiar with. Agronomists have improved upon both and members of their families now carry other names. But these two general families are still the best Missouri soft wheats for milling, and their predominating presence in Missouri wheat as a whole has been responsible for the premium Missouri wheat has commanded over other soft wheat states. One other variety is approved in reasonable percentage in the mill mix, and that is Fulcaster, but not its bearded relatives. Fulcaster is the only bearded soft wheat I would approve for inclusion in a soft wheat mill mix. The hard wheat family in Missouri is bad, no matter what name it bears.

The Missouri College of Agriculture—Dr. Etheridge and Mr. Helm, have developed a wheat known as Missouri Premium that is good. Maybe it would have been more popular with Missouri farmers if they had christened it

"Kaw River Premium" or "Premkan" or have tied some other sort of "kan" onto it.

Kawvale Wheat.—During the past ten months I have conducted exhaustive research on Kawvale variety of wheat grown in Missouri. It would require two hours to report the results. Summed up, Kawvale wheat is bad for Missouri. The only difference between Kawvale wheat and a Missouri mule is that Kawvale reproduces itself.

I am unable to speak first hand for the milling quality of Clark-an wheat—I don't like the "Kan"—but from reliable information received, I can say it is good. Several of our millers and thousands of Missouri farmers are enthusiastic about Clark-an.

Beware of hard wheats for Missouri. Turkey names—or Russian names—or American names. If enough of these wheats are produced in Missouri to appear in volume on the markets, they may have to go to Chicago to build cheap contract grade wheat, or to Kansas City for the same purpose at a wide discount under good Kansas hard wheat.

For generations, hard wheat has been available as seed for the Missouri farmer, and each generation has at some time or other given it a trial; but always Missouri has returned to good soft wheat. After these generations of experience, it is quite reasonable to assume that it would not be left for the present generation to discover that the hard wheat family is adapted to Missouri conditions.

Soil Improvement.—On the other hand, this generation of wheat growers should improve upon the conditions of the next previous generation. Missouri soil is worn. It will not produce so hardy wheat from the old varieties. The farmers' solution seems to be either soil improvement or grow a wheat that will produce on the poorer soil. In many cases this means changing wheat varieties. This problem is to develop strains of the old varieties adapted to present soil conditions in Missouri, and the College of Agriculture has been doing a good job. Co-operating with them is the Corn Growers' Ass'n (it should be the Grain Growers' Ass'n) composed of some of the best seed growers in America. Every grain dealer and miller in Missouri should help these seed growers sell their pure strains of good soft wheat in Missouri, so that every bushel available will go back into Missouri soil each year. I am sure Mr. Helm will gladly furnish you a list of registered and certified seed each year. He will also know of lots of wheat that did not

pass the Corn Growers' rigid requirements, but still so far superior to the average wheat seeded by farmers that you can safely recommend it.

Each harvest you receive a crop or more of pure strain soft wheat from growers who will not bother themselves to sell it for seed. If you can buy it in sacks—even pay a little premium if necessary—and put this away until after harvest, you can then clean it and sell it back in your home community as a favor to your customers. If you are not equipped to do this, buy the pure strain soft, keep it unmixed, and sell it to one of us country mills who will distribute it for seeding purposes, or resell to you at seeding time. The Missouri mills plan extensive seed wheat distribution this year.

By co-operating with the College of Agriculture and the Corn Growers' Ass'n, the grain dealers and millers of Missouri can and will maintain in the future the high quality pure strains of good soft wheat that have in the past kept Missouri wheat on the premium list in every American market.

Hybrid Corn Needs Good Soil

By C. C. CUNNINGHAM, El Dorado, Kan.

Since hybrids vary greatly in their worth and adaptability it is always necessary to test them over a period of three or more years before an accurate estimate of their value for any given locality can be arrived at. In Iowa and Illinois and to a lesser extent in a few other states an extensive program has been under way wherein hybrid corn development by seed companies, corn breeders and the experiment stations are tried out in carefully conducted and properly supervised test plots. These test plots are sufficiently numerous and so located that the hybrids best suited to all parts of these states can be determined. A number of tests will be put under way in Kansas this season and within two or three years data regarding the hybrids best suited for growing in the various sections of this state should be available.

At the present time information regarding the value of the hybrid seed corn for Kansas is too insufficient to warrant reliable recommendations concerning their worth or adaptability. In the few tests in which reliable comparisons have been made under supervision of the Kansas Experiment Station, the better producing hybrids have not outyielded the best locally adapted varieties sufficiently to pay for the extra cost of the seed. Many farmers have tried out hybrid corn. Some have reported satisfactory results, while others failed to secure yields as good as those for home-grown varieties of open-pollinated corn. Because of the varying seasons in Kansas, a hybrid that does well one year may be wholly unsatisfactory the next, and vice versa.

Unfortunately, hybrids developed from adapted Kansas varieties or strains of corn are not available. This is not due to a lack of enterprise or effort on the part of Kansas corn breeders, but to the frequent complete corn failures that have occurred during the past eight years. When such hybrids are to be had no doubt they will prove more satisfactory than those introduced from other localities.

Information developed in other states shows that hybrid corn as a rule does not maintain its relatively superior producing capacity when grown on poor soils, in adverse seasons or under other unfavorable conditions. A given hybrid on land where yields of sixty to eighty bushels of grain are normally produced may outyield open-pollinated corn fifteen to twenty bushels per acre, but on soils where only twenty to thirty bushels are secured as a rule, the difference in yield may be insufficient to warrant the increased cost of the seed. Likewise a crop grown where the available moisture limits the yield to a low figure, a hybrid might not yield any better than the open-pollinated corn, even though its capacity to yield under favorable conditions is much greater.



GOODRICH BROS. CO. ELEVATOR
WINCHESTER, IND.

GOODRICH BROS. CO.

ELEVATOR

Winchester, Ind.

is equipped with a

HESS

Automatic, Oil Burning
Direct Heat

DRIER AND COOLER

They're Profit Makers

HESS WARMING AND VENTILATING CO.

1211 SO. WESTERN AVENUE
CHICAGO, ILLINOIS

Feedstuffs

Ottawa, Ont.—During the 12 months ending Sept. 30, 1938, 447 feed manufacturers in Canada registered 2,371 brands of feed.

Sacramento, Cal.—The governor has signed A.B. 2527 changing feed registration to a license basis and requiring an established place of business.

Production of brewers dried grains reached the season's peak in June and totaled 11,700 tons, bringing the 1938-39 total to 103,100 tons. June production last season was only 10,500 tons but the 1937-38 output was 108,900 tons.—U.S.D.A.

Alfalfa meal production during June, the first month of the 1939-40 season, totaled about 37,000 tons, the largest production for that month since compilation of statistics began in 1927. About 35 per cent or 13,000 tons was dehydrated meal.—U.S.D.A.

Decatur, Ind.—A one-day nutrition conference attended by 400 veterinarians and 50 nutrition workers from the colleges was held July 12 at the plant of the Central Soya Co. Dr. G. I. Christie, pres. of Ontario Agricultural College and formerly of Purdue University, was the principal speaker at the evening banquet.

Production of distillers dried grains during the 1938-39 season were the smallest since the compilation of these statistics were begun in 1935 with a total output of only 149,100 tons reported by distilleries. Production during 1937-38 was 156,300 tons. June production of 10,900 tons was slightly above the June, 1938, output.—U.S.D.A.

Imports and Exports of Feeds

Imports and exports of feedstuffs during May and for 5 months ending May, 1939, as reported by the Bureau of Foreign and Domestic Commerce, were as follows, in tons of 2,240 lbs., except where noted otherwise:

	Imports			
	1939	1938	5 mos. ending May 1939	1938
Hay*	2,841	700	21,189	10,780
Coconut cake† ..	8,844,248	6,409,122	47,306,501	31,337,747
Soybean cake† ..	2,911,307	3,629,756	12,004,237	16,045,043
Cottonseed cake† ..	279,120	739,320	6,377,811	1,956,820
Linseed cake† ..	1,716,000	1,150,000	6,821,066	5,162,100
All other cake† ..	2,898,262	862,100	10,188,750	7,186,745
Wheat fds.* ..	50,737	406	146,959	5,565
Beet pulp* ..	1,001	1,064	7,150	22,067
Tankage ..	6,955	2,348	23,630	11,194
Fish scrap ..	4,885	571	26,812	18,326
Exports				
Hay	306	4,867	1,519	58,911
Cottonseed cake	1	15,938
Linseed cake ...	17,374	9,852	105,296	80,939
Other oil cake ...	300	1,570	2,372	3,996
Cottonseed meal ...	72	728	1,403	8,695
Linseed meal ...	862	647	4,197	4,795
Soybean oil-cake meal	1,578	...	14,706	...
Other oil-meal cake	634	4,841	2,649	20,536
Fish meal ..	40	45	127	366
Mxd. dairy & poultry fds.	932	936	4,166	3,571
Oyster shells	4,105	1,825	20,427	11,164
Other prepared & mxd. fds.	271	393	1,287	1,258
Other fd. bran ...	1,970	1,542	9,545	10,419
Kafir, milo (bus.) ..	404	43,011	416	200,870

*2,000-lb. tons. †Pounds.

The Ass'n of American Feed Control Officials will hold its annual meeting at the Raleigh Hotel, Washington, Nov. 2 and 3, is announced by Leslie E. Bobst of College Park, Md., sec'y-treas.

Shreveport, La.—To keep its feeds in line with the current trends in animal and poultry nutrition the Kalmbach-Burkett Co. has employed at full time C. E. Ryan, who holds a master's degree of Louisiana State University in animal husbandry.

Moore Haven, Fla.—Farmers growing Egyptian wheat for feed have persuaded the Everglades Milling Co. to put the crop thru its dehydrator. Last year's experiment was so successful a larger crop was planted this year. Heretofore curing has required several days of dry, hot weather with a heavy labor cost for keeping the grain turned and exposed to the sun. The milling company receives a good share of the crop as toll.

Manitowoc, Wis.—The Rahr Malting Co. announced July 18 that until further notice it was giving away free bags of malt-hulls. The firm has a surplus stock of the hulls and pointed out that the hulls have considerable feed value. The company announced that analysis shows the hulls to have about 10 per cent protein, 17 per cent crude fibre and 1.5 per cent crude fat and that when added to other feed materials on the farm, the mixture becomes more palatable.—H. C. B.

The Rural Electrification Administration which is planning to build a feed mill in each state this year has announced twenty-two allotments aggregating \$3,731,500 for projects in fifteen states. Since this bureau for wasting the tax payers' accumulated savings was created in May, 1935, it has allotted \$233,489,830 for the promotion of unnecessary companies to compete with private enterprises. The Washington dispensers of patronage seem to be convinced that it is a crime for an individual to engage in the feed business.

Sacramento, Cal.—L. M. Jeffers of the state department urges that L.C.L. and small lot buyers of simples and concentrates should specify standard brands and grades in their purchases of simples and concentrates. That this would avoid much trouble with analysis content of their proprietary mixes, and that this was especially true also with special mixes. The use of substandard concentrates not guaranteed as to analysis lowered the feed-

ing value of such feeds. Mr. Jeffers says there is entirely too much use of the statement "alfalfa leaf meal" on the analysis tag, whereas the overage of fiber analysis indicated that only straight alfalfa meal was being used. He said it would be the policy of the department to rigidly enforce this provision.

Feed Trade Will Celebrate National Week

Co-operation of the feed industry promises to make National Feed Week, October 16-21, the most outstanding celebration since it was inaugurated in 1937.

The official poster is now available. Stickers for outgoing mail and advertising literature are also ready for distribution. Both will be furnished at cost price by National Feed Week Headquarters, 741 N. Milwaukee Street, Milwaukee.

Raymond Maas, Milwaukee, who designed the 1937 poster, received a prize of \$50 in this year's poster contest. Judges who made the final decision were Will Sargent, Des Moines, Ia.; W. D. Walker, Chicago, and David K. Steenbergh, Milwaukee.

All members of the feed and allied industry are urged to help make the official slogan of National Feed Week, "Better Feeding Brings Bigger Profits," a national by-word among feeders not only from October 16-21 but the year 'round.

Stability of Carotene in Mixture

An investigation of the stability of vitamin A in cod liver oil and carotene in dehydrated alfalfa leaf meal when incorporated in a ration of common feed ingredients and stored at approximately room temperature, showed that both factors were unstable and that they were destroyed at about the same rate, altho significant amounts of added vitamin A and carotene were still present after six months' storage.

It was also noted that the loss of both carotene from alfalfa leaf meal and vitamin A from cod liver oil was affected by the type of ration. A significantly greater loss of both vitamin A and carotene occurred in the basal ration containing meat scraps and dried skim-milk than a comparable ration in which casein replaced the above ingredients. Not over 50 per cent of the added vitamin A from cod liver oil or carotene from alfalfa leaf meal was lost from the casein ration after six months' storage, in contrast to an approximate 75 per cent loss of both factors in the meat scraps-dried skim-milk ration.

The addition of 0.10 per cent hydroquinone to the diluted cod liver oil solution before incorporation in the meat scraps-dried skim-milk ration did not decrease the loss of vitamin A in the stored ration.—Ohio Agri. Exp. Sta.

"RANDOLPH"

OIL-ELECTRIC GRAIN DRIER

The Drier Without a Boiler

ASK THE MAN WHO HAS ONE

THAT'S ALL

MANUFACTURED BY

O. W. RANDOLPH COMPANY

3917-21 Imlay St., TOLEDO, O., U. S. A.

Fiber Content of Feeds

By C. F. HUFFMAN, Michigan State College,
before American Feed Mfrs. Ass'n.

Altho the horse is a heavy consumer of roughage, it is not as efficient in the utilization of this feed constituent as cows and sheep. This is shown in Table III.

Table III. Fibre Digestion in Sheep and Horses
Digestion Coefficients of Fibre

Source of Fibre	Trials with sheep	Trials with horses
Wheat straw	59	27
Meadow hay—inferior ..	68	39
Meadow hay—average ..	56	36
Meadow hay—superior ..	63	42
Pasture grass—dried ..	80	57
Red clover hay	50	37
Alfalfa hay	45	40
Oats	30	21
Beans	79	65

In general, these comparisons show a marked superiority of ruminants over horses in the digestibility of crude fibre. This is probably due to the fact that the caecum of the horse does not afford as much opportunity for bacterial digestion as the rumen, reticulum, and omasum of the ruminant.

The pig with its small caecum also is handicapped in fibre digestion altho the work of Woodman indicates that the non-lignified cellulose is digested efficiently by this animal as shown in Table IV.

Table IV. The Digestibility of Non-lignified and Lignified Crude Fibre by Pigs and Sheep
Digestion Coefficients of Fibre

Non-lignified feeding stuffs:	Trials with pigs	Trials with sheep
Sugar beet	90.1
Molasses, sugar beet pulp ..	84.4
Dried sugar beet pulp ..	84.3	89.7
Mangolds	79.0	78.0
Lignified Feeding stuffs:		
Corn meal	23.0	58.0
Barley	10.8	55.0
Dried brewers' grains ..	15.0	48.0
Linseed meal	12.0	32.0
Grass	39.4	69.5

The recent results reported by Mitchell indicated that swine do not digest lignified cellulose very efficiently. The work of Lathrop and Bohstedt indicates that swine made good gains when the fibre content of the ration was 7.5 to 8.0 per cent.

Frap showed the relative power of the pig, ruminant and poultry to digest crude fibre as indicated in Table V.

Table V. The Digestibility of Crude Fibre by Pig, Ruminants and Poultry

Feed and Species	Coefficient of Digestibility of Crude Fibre
Corn—Pigs	33
Ruminants	31
Poultry	13
Oats—Pigs	11
Ruminants	42
Poultry	7
Alfalfa—Pigs	21
Ruminants	46
Poultry	1

According to Halnan, the food passes thru the digestive tract of the chick in four hours. There is very little opportunity for bacterial digestion to take place in the caecum due to its small size. Henning reported that from five to 21 per cent of the crude fibre of various feeds was digested by poultry. Morris and associates experimented with rations similar in all respects except that the fibre content ranged from three to 10 per cent of the ration. The results showed that there was very little difference in the coefficients of digestibility of the various nutrients for the different lots. The 10 per cent fibre level did not materially depress the coefficients of digestibility of the other constituents. These investigators concluded that the amount of fibre in the ration of chicks could be increased to as much as eight to nine per cent of the ration without harmful effects on chick mortality, rate of growth, feed consumption, age of maturity, and egg production.

Wilcke of Iowa reported that much better results were secured with chicks when the ration contained six to seven per cent fibre than

when the fibre was kept at a very low level (two to three per cent). A moderate amount of oat hulls in the ration of chicks appeared to increase growth, and feathering was improved in both rate and quality. Perosis was also reduced.

Recent experiments have shown that grass and legume hays properly cured contain many necessary dietary factors which are not usually present in sufficient amounts in common concentrate feeds. Such roughages are especially good sources of many of the vitamins including carotene, most of the "so-called B complex" and vitamin K. The possibility of important nutritional roles of cellulose and pectin has recently been indicated. The synthesis of lysozyme in the intestines may be brought about by vitamin A and galacturonic acid which is formed from cellulose or pectin. The enzyme aids in maintaining a normal flora in the gut.

The value of cellulose and pectin in the ration of swine was recently indicated by the work of Sheehy in Ireland, where the addition of Irish moss, or carrots to a basal ration resulted in a marked gain in weight.

Many years ago, alfalfa was added to a fox feed upon my suggestion. The alfalfa altho high in fibre was added to supply vital factors which otherwise would have been difficult to incorporate because of expense. Today alfalfa is even added to certain cereal foods for infant feeding.

It is interesting to note that most animals can tolerate large quantities of fibre without decreasing total food intake, and in some instances results in increased dry matter intake.

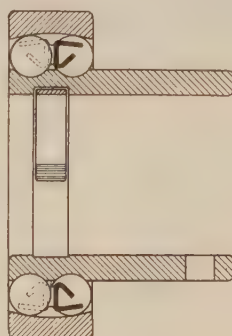
In compounding a superior ration for animals, especially swine and chickens, the addition of a reasonable amount of feeds fairly high in crude fibre providing those feeds are rich carriers of needed dietary factors appears justified. This does not mean, however, that feeds should be loaded with cheap worthless sources of crude fibre.

The SKF Grip-Lock Bearing

The SKF Grip-lock bearing is a valuable addition to the SKF line of anti-friction bearings. The grip-lock principle offers the advantage of quick, simple application of the bearing without tools of any kind and insures the user of a bearing positively locked to the shaft.

Essentially, the bearing is the conventional, well-known SKF self-aligning extended inner race bearing with an eccentric groove machined in the bore of the inner race. Fitted in the eccentric groove is a piece of spring steel known as the Grip-lock shoe. When the shoe is in the deepest part of the eccentric groove the bearing may be readily slipped on the shaft. Then, by holding the inner race of the bearing while the shaft turns in the direction of operation, the knurling at the ends of the grip-lock shoe grips the shaft causing the shoe to wedge in the shallow part of the eccentric groove thus securely locking the bearing on the shaft.

Many of these bearings are now used in various machines. The simplicity of assembly without necessity for shaft machining



Grip-Lock Bearing

has resulted in their use in many locations where plain bearings were considered standard.

Users report substantial savings in assembly cost and more satisfactory results from these bearings as no radial slippage can occur, for the more the load, the tighter the grip-locks.

Antidermatosis Vitamin Required for Reproduction

By J. C. BAUERNEFEIND and L. C. NORRIS, Department of Poultry Husbandry, Cornell University

The antidermatosis vitamin is the water-soluble factor which prevents the dermatosis or pellagra-like syndrome of the chick, first described by Ringrose and Norris and obtained in aggravated form on the Wisconsin heated diet. Altho dermatosis in chicks has been frequently observed in the experimental laboratory, no evidence that the mature fowl suffers from a deficiency of this vitamin has yet been reported. Hence a study of this problem was initiated, the results of which are presented in this report.

White Leghorn pullets were used as the experimental subjects in this study. The control group of pullets was fed the following diet, designated the normal diet:

	Per cent
Yellow corn meal	40.65
Wheat bran	20.00
Wheat flour middlings	20.00
Purified casein	7.00
Liver extract	0.35
Soybean oil	5.00
Wheat germ oil	0.50
Cod liver oil	0.50
Pulverized limestone	3.50
Steam bone meal	2.00
Iodized salt	0.50
Manganese carbonate	trace

The remaining pullets were fed the same diet except that the cereal portion and the liver extract were heated in an oven for 36 hours at 120° C. in order to destroy the antidermatosis vitamin. This diet was designated the heated diet.

By proper attention to composition and thru appropriate biological assays the heated diet was demonstrated to contain all the vitamins known to be required by the domestic fowl or not yet shown to be required, with the exception of the antidermatosis vitamin and the new growth and reproduction factor reported by Bauernfeind et al. These are vitamins A, B₁, B₂, B₆, D, E, K, riboflavin (G), nicotinic acid and the anticephalomalacia factor.

The new growth and reproduction vitamin was added to the heated diet by means of a whey adsorbate and the antidermatosis vitamin by means of a rice bran concentrate. This concentrate had been treated several times with fuller's earth to remove vitamin B₁, riboflavin and most of vitamin B₆. The concentrate was assayed in accordance with the procedure of Jukes and Lepkovsky and found to have an antidermatosis value of 25.

At the start the hens were divided into two groups, one of which was fed the heated diet in order to deplete the hens in this group of their reserves of the antidermatosis vitamin. This was determined by studying the hatchability of the eggs laid by this group. Weekly hatches were conducted during a depletion period of 7 weeks. The average hatchability of the eggs of the hens fed the normal diet during the depletion period was 63.9 per cent, while that of the hens fed the heated diet was 15.8 per cent. The hatchability of the latter group decreased to 2.7 per cent during the depletion period. No improvement in the hatchability of this group was obtained by supplementing the heated diet first with 5 per cent of the antidermatosis-vitamin concentrate and finally with 10 per cent.

Since it was recently found that the heated diet was also deficient in a new growth and reproduction factor, liable to dry heat treatment, the hens fed this diet were divided into

three groups. One group was fed the heated diet as heretofore, a second group was fed the heated diet plus 5 per cent of whey adsorbate containing the new factor, and a third group was fed the heated diet plus 5 per cent of whey adsorbate and 5 per cent of the antidermatosis vitamin concentrate. Their response in hatchability of eggs to these treatments was compared to that of the group of hens fed the normal diet. The results are presented in Table 1.

Table 1. Hatchability Results Obtained During the Experimental Period

Pen	Number eggs set	Number hatches	Per cent hatch
Normal diet	232	6	60.0
Heated diet	115	6	2.8
Heated diet plus 5% whey adsorbate	139	6	3.3
Heated diet plus 5% whey adsorbate plus 5% antidermatosis vitamin concentrate	136	6	48.0

The average hatchability of the eggs of the hens fed the normal group was 60.0 per cent during the experimental period, while that of the eggs of the hens fed the heated diet was 2.8 per cent. When 5 per cent of whey adsorbate was added to the heated diet no improvement in hatchability was obtained over that on the heated diet. But when both 5 per cent of whey adsorbate and 5 per cent of antidermatosis vitamin concentrate were added to the heated diet the hatchability increased rapidly so that at the third hatch it was approximately equal to that of the hens fed the normal diet. The average hatchability of this group of hens during the experimental period was 48.0 per cent.

The hens were fed the heated diet for a period of 28 weeks without any macroscopic evidence of dermatosis developing and without any effect upon egg production or mortality. When a similar heated diet was fed to the chicks of normally fed hens, dermatosis did not develop until the chicks were 14 days of age. But when the chicks of hens nearly depleted of the antidermatosis vitamin were fed in a like manner, symptoms of dermatosis appeared at three to four days of age. This is evidence that the hens fed the heated diet deposited less of the antidermatosis vitamin in their eggs than the hens fed a normal diet.

It is concluded from the results presented in this report that the antidermatosis vitamin is required for hatchability or reproduction in the domestic fowl but that a lack of this vitamin did not affect egg production or mortality during the period represented by this experiment.—*Science*.

Adulteration and Misbranding

The Majestic Flour Mill, Aurora, Mo., was fined \$150 for misbranding wheat gray or brown shorts.

The Consolidated By-Products Co., Philadelphia, Pa., was fined \$100 for the sale of beef and bone scrap deficient in protein.

Swift & Co. were fined \$50 on a plea of guilty to having shipped cottonseed meal containing not more than 40.81 per cent protein when the label called for 43 per cent.

The Temple Cotton Oil Co., Little Rock, Ark., was fined \$100 on a plea of guilty to having shipped cottonseed meal containing less protein and more fiber than stated on the label.

The Scientific Compounding of Feeds

Synopsis of Address delivered before the Ohio Grain, Mill and Feed Dealers Ass'n, by Dr. J. E. HUNTER, Director of Research, Allied Mills, Inc.

Within the last decade a tremendous amount of good, sound, nutritional information has been published by various research agencies. This information can be used to eliminate "guesswork" from a feeding program. Regardless of all of this information, many persons still judge feeds by their analysis as portrayed by protein, fat and fiber. These measuring sticks, while important, tell only a small part of the story about feeding value. Two bags of feed can show exactly the same amount of protein, fat and fiber, but have tremendous differences in feeding value. Much of the nutritional research of recent years has dealt with the "hidden values" of feeds. The protein, fat and fiber analysis of a feed portrays nothing of protein digestibility or of the mineral and vitamin make-up.

Many people extol the virtues of a particular feed formula. A feed formula in itself is meaningless unless the blending of the various ingredients takes into consideration their quality.

Proteins are made up of simpler substances called amino acids. All protein materials do not contain all of the essential amino acids. A thorough study of the amino acid make-up of proteins is necessary before a number of protein-carriers can be blended together to make a feed that contains a full complement of amino acids. After this information is at hand, high quality animal and vegetable proteins can be blended together to make a feed that is adequate from the protein standpoint.

Vitamins have been given much consideration within recent years. A few years ago they were regarded as "sweet mysteries of life." The research worker has cleared up much of the mystery surrounding vitamins, and today many of these food factors that were regarded as mysteries a few years ago, have been isolated and shown to be definite chemical compounds.

Vitamin A has long been recognized as an essential food factor and today much worthwhile information is available regarding the requirements of various animals and birds for this vitamin. Vitamin A can be supplied from many sources, the principal ones being fresh green feeds, fish oils, alfalfa meals and yellow corn. There is a tremendous variation in the

vitamin A potency of ingredients. Two samples of alfalfa may show the same color and general appearance, but there may be 100% difference in their content of carotene, or provitamin A. Vitamin A carriers can be effectively used only after an assay has been made to determine their potency.

Poultry feeders are aware of the many advantages attendant with the feeding of fish oils as a source of vitamin D. Many feeds fall short of being protective because the potency of the oil used to supply vitamin D was not known. Much information is available on the requirements of poultry and animals for the D factor, but the D requirement cannot be intelligently met unless the exact vitamin D potency of the oil is ascertained.

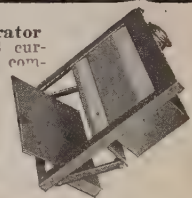
Much has been disclosed regarding the value of riboflavin in feeds. This factor is commonly known as vitamin G and is of extreme importance for growth of chicks and hatchability of eggs. It can be supplied in poultry rations thru the liberal usage of high quality liver meal, high quality dried milk products and high quality dehydrated alfalfa. Many other feeding ingredients carry lesser, although appreciable, quantities of riboflavin. Riboflavin sources also vary considerably in their potency and can be intelligently used in a feeding program only after their potency has been definitely ascertained through assay procedure. Two samples of dried milk may have the same appearance and the same protein content, but may vary greatly in their content of riboflavin.

In England the government pays the farmer \$10 an acre to plow up grass land for grain; in the United States the Washington administration rewards him for cutting grain acreage and seeding more grass.

HOMER Automatic Magnetic Separator

Positive action on AC or DC current. Reasonably priced. Its compactness and light weight permits easy installation on chute or spout. Approved by Mutual Fire Prevention Bureau of Chicago, Ill. Write for literature and prices.

THE LIMA ARMATURE WORKS, INC.
438-440 N. Main St. Lima, Ohio



CHECK
YOUR
FORMULAS
with
Laboratory
Analyses

Protein, Fat, and Fibre
—Feed or Grain—
Analyzed at
Reasonable Rates
Runyon Testing Laboratories
1106 Board of Trade Chicago, Illinois
"Runyon Analyses Help Sell Feeds"



Corn Gluten Feed, Corn Oil Cake Meal,
Brewers' Dried Grains Malt Sprouts
ANHEUSER-BUSCH ST. LOUIS

For TROUBLE-FREE Grinding

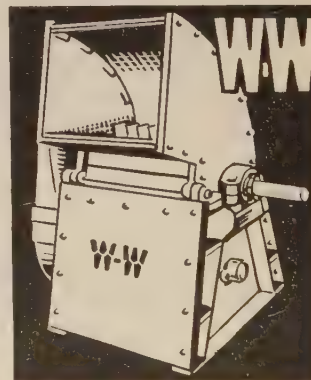
ORDER

W-W

Outstanding features, heavy construction and the famous Star Cylinder enable W-W to stand up under toughest jobs. Star Cylinder develops great capacity under little power and practically eliminates "slugging." Big mouth speeds feeding. Ideal for all commercial grinding. Easily handles the flint-like hardness of hybrid corn, offering you extra profits from that "booming" feed business as a custom grinder.

FREE catalog on request. Write!

W-W GRINDER CORP. Dept. 315 WICHITA, KANSAS



Beginning Oct. 24, 1939, under the wages and hours law the minimum will be 30c per hour on the basis of a 42 hour week. All labor performed in any one week by an employee in excess of 42 hours must be paid at the rate of time and a half the regular wage for the excess hours; in other words, beginning Oct. 24, the work week will be 42 hours instead of 44, and the minimum wage will be 30c an hour instead of 25c.

Poultry Feeds and Feeding

College Park, Md.—A large gathering of scientists interested in poultry improvement attended the dedication July 26 of the new poultry building and poultry plant of the University of Maryland.

In June 7.05 dozens of eggs were required to buy 100 lbs. of poultry ration, against 5.82 in June, 1938, and 7.86 during an average for June, 1938 to 1937, as reported by the U. S. D. A. In November only 3.03 dozens of eggs were required.

"Poultry Tour of New England" is a motion picture by Professor R. H. Barrett of Massachusetts State College, being made during July in trips of 2,000 miles by plane. After exhibition at the World's Poultry Congress, daily, the picture will be available to other organizations.

"Nomoppin" in 45 bottles has been seized and condemned by the government for false and fraudulent representation by the McMillan Drug Co., Columbia, S. C., as a tonic for poultry. The article consisted of 2 grams per 100 c.c. of arsenous acid, a small proportion of potassium carbonate and water.

Taylor & Lerner, of the University of California report that inclusion of 15 or 25 per cent of wheat bran in a mash composed of ground whole grains, fishmeal, skimmilk, alfalfa meal, green feeds, minerals, and sardine oil resulted in more rapid growth, earlier sexual maturity, and, as a result of the latter, lower egg weight at the beginning of laying. The annual production, March egg weight, and extent and character of pathology were not significantly affected by such change in ration.

Turkey Finishing Ration

Very slight differences were noted in the body weight of turkeys at 20 weeks of age when fed by different methods. The average weight of the toms at 20 weeks was 17.5 pounds and of the hens 11.9 pounds.

Equally as good results were secured in hopper feeding of grain as hand feeding of grain to turkeys from 6 weeks on.

At 28 weeks of age, there was very little difference between live body weights of the various lots of hens or toms fed different finishing rations plus alfalfa. The average gain for the toms was 8.4 pounds as compared to 4.0 pounds for the hens for the 8-week finishing period.

The turkeys consumed approximately 48 per cent of their total feed during the two-month finishing period. When the scratch grain contained a high percentage of corn, the turkeys consumed a higher percentage of grain than when fed a low-corn mixture.

Hens showed approximately two weeks earlier feathering and fleshing than the toms as measured by scored observations. Feather picking occurred only on the toms, and was restricted to the new main tail feathers.

The shrinkage between the live weight before killing and the dressed weight was 9 per cent after 24 hours' starvation period on wire floors.

There was little difference in the dressed body weights of the same sex turkeys in various lots. All lots showed a high percentage of top U. S. grade of turkeys. Hens graded higher than toms—95.8 per cent prime hens or better, and 83.1 per cent prime toms or better.

The rations showed practically no difference in average returns per turkey over feed cost, with a range of \$2.19 to \$2.35.

All finishing rations used in this experiment gave good results in growth, feathering, and fleshing. The high-corn ration gave more color and greater gains to the turkeys than the lower corn rations. Hens had more color than toms.—State College of Washington, Bulletin No. 372.

Nutritional Gizzard Lesions in Chicks

By WILLIAM B. ESSELEN, JR., Nutrition Laboratory, Massachusetts State College, Amherst, Mass.

Under the experimental conditions of this investigation it was found that the gizzard lesion-producing diet of Almquist was more effective than the diet of Bird in producing nutritional gizzard lesions in chicks. With the diet of Almquist marked gizzard lesions could be produced within two weeks, starting with day-old chicks.

The Massachusetts State College chick ration, which was used as a control diet, gave practically complete protection against gizzard lesions. A study of the individual components, and combinations of them, of this ration was made in order to determine why it prevented gizzard lesions. It was found that mixture of 15 per cent each of wheat middlings, wheat bran, and oat groats, and 4 per cent of alfalfa leaf meal when added to the Almquist diet was almost as effective as the Massachusetts State College ration itself in preventing gizzard lesions. Altho, in this instance, these amounts of the supplementary dietary ingredients effectively controlled gizzard lesions, it must be realized that this may not always be true. It is quite possible that these materials will vary in their content of the anti-gizzard lesion factor depending upon their source, storage conditions, and previous history.

The experimental evidence also points to the fact that there is no correlation between chick growth and the severity of gizzard lesions.

The gizzard lesion curative studies showed that dried pork lung, alfalfa leaf meal, soybean meal, oat groats, and wheat middlings were all effective, at least to some degree, in curing gizzard lesions. Of these the alfalfa leaf meal appeared to be the most effective at the levels fed. The control Massachusetts State College ration, which was very effective in preventing gizzard lesions, was likewise a very good curative agent.

It was demonstrated that chicks kept for one or two weeks on a diet which prevented gizzard lesions, soon developed lesions if

placed on the Almquist gizzard lesion-producing diet. These findings provide further evidence that chicks do not store any great amount of the anti-gizzard lesion factor in their body and that they do need a constant source of this factor in their diet.

A preliminary study with turkey poult indicated that young turkeys are either not susceptible to nutritional gizzard lesions or that they are much more resistant to them than are chicks.—*Poultry Science*.

Wheat ground by 1,082 reporting mills during the 11 months prior to June 1 amounted to 440,233,789 bus., against 426,358,255 bus. ground in the like period preceding, as reported by the Bureau of the Census. Flour production was 96,197,584 barrels, against 92,499,579 barrels.



Everything for Mill and Elevator
THE DUPLEX MILL & MFG. CO., Springfield, Ohio

Practical Poultry Farming

By L. M. Hurd

This revised and enlarged edition is right up-to-date and contains all important discoveries in poultry raising made in recent years.

The book contains the latest information on feeding, a complete discussion of the new vitamin G, practical information on the two-story poultry house and heating, disinfecting incubators, battery brooding and raising chicks on screened platforms, and the latest discoveries in treating pests and diseases, including Leukemia, and the newest information on disinfecting houses. This edition also describes the new methods of feeding turkeys.

Printed on enamel book paper from large type and well bound in cloth. 480 pages, 33 chapters, and 200 engravings. Weight 2 lbs. Price \$2.50 plus postage.

Grain & Feed Journals

Consolidated

332 S. La Salle St. Chicago, Ill.

ROSKAMP'S CHALLENGER HULLER

The Huller of tomorrow, here today. Automatic feed; 100-175 bushels per hour; contains the very latest features ever built into a huller; designed especially as a profit-producing unit for the progressive feed merchant; does a better hulling job.

Remember: When you buy a CHALLENGER HULLER you are buying service. Our experience in the building of a better class of hullers enables us to be of real service to you. Consult us. There is no obligation. Ask us for further information.

Write today.

ROSKAMP HULLER CO.

CEDAR FALLS, IOWA

Poultry Feeding Exhibit at Cleveland

Unusual effects produced in feeding poultry will be revealed in displays of natural-color photographs, wax models, and mounted birds in the U. S. Government exhibit at the 7th World's Poultry Congress, Cleveland, O., July 28 to Aug. 7.

The displays give practical pointers on how to produce eggs and poultry of satisfactory market quality, and how to recognize various forms of malnutrition and vitamin deficiency in chickens. The displays also show how various interesting color combinations may be produced in the yolks and whites of eggs, including the more marketable combinations.

To demonstrate the effect of different diets on the skin color of dressed poultry, nutrition experts in the U. S. Department of Agriculture raised two yellow-skinned breeds of chickens, White Leghorns and Rhode Island Reds, and one white-skinned breed, the Light Sussex, especially for the exhibition. The dressed carcasses are reproduced in wax.

The wax reproductions show that yellow-skinned breeds produced on a diet containing pigmented supplements, such as yellow corn and alfalfa leaf meal, will dress out with considerable yellow color in their skin, but that the white-skinned breeds raised on the same diet will carry only a very slight yellow tint. The addition of corn oil to such a diet tends to increase the depth of color in the skin of the yellow-skinned breeds and generally has a slight but perceptible effect on the skin of the white-skinned breeds. The wax models also indicate that yellow-skinned breeds produced on a diet not containing suitably pigmented feeds will have a skin color about as white as that of the white-skinned breeds.

A natural-color photograph of broken-out eggs shows the effect of the presence or lack of pigmented supplements in the diet of laying hens. Eggs with orange-red yolks were produced by hens on a well-balanced all-mash laying diet with chili peppers added, those with the more desirable yellow yolks on the well-balanced diet with nothing added, those with

pale-yellow yolks on the same diet with either yellow corn or alfalfa leaf meal removed; and those with very light-colored yolks on the diet with both yellow corn and alfalfa leaf meal eliminated.

Chicks produced at the Agricultural Research Center, Beltsville, Maryland, on various deficient diets, have been mounted for display in the exhibit. They show these abnormalities:

Bent and twisted legs—due to a deficiency of the mineral, manganese, which is usually supplied in the form of anhydrous manganous sulphate.

Sore eyes, colorless shanks and beak—vitamin A shortage. This vitamin is available in yellow corn, green feeds, and cod-liver oil.

Neck bent over the back of the chick with beak pointing up—lack of vitamin B, which is found in most grains and seeds.

Hemorrhage under the skin—vitamin K deficiency. Such feeds as hog-liver fat, dried alfalfa, tomatoes, and kale will supply vitamin K.

Toes curled inward—vitamin G, or riboflavin, deficiency. This vitamin is found in dried milk byproducts and in green feeds, such as alfalfa leaf meal.

Stunted growth, short legs, soft bones, beak crisscrossed—no vitamin D. Sunshine and cod-liver oil supply vitamin D.

Encrustations at corners of mouth—anti-dermatosis factor missing from diet. This factor is supplied in grain and other feeding stuffs.

Effect of Single Cereal Grains Upon the Hatchability of Eggs

Velan D. Call and H. L. Wilcke, at the Iowa Agricultural Experiment Station, Ames, used four lots of yearling hens in an experiment, at the beginning a rather uniform group. They were all kept under as nearly similar conditions of housing and management as possible. The variations of feed, as far as it was possible to estimate, occurred only in the grains fed. All were supplemented with similar sources of vitamins, proteins, and minerals. All eggs were handled and incubated under the same conditions. The chicks hatched were treated in a uniform manner.

Mortality was high in all lots of breeders, but oats seemed to improve viability. Wheat fed as the only grain produced a diarrhea in adult birds and apparently was a contributing factor in high mortality.

Egg production was markedly reduced in the wheat and oat pens. The production in the other pens was rather uniform, with corn being equal to mixed grains for egg production.

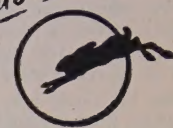
Fertility was not affected significantly by the different rations.

Hatchability was best with eggs from the wheat birds, followed by oats, with corn and mixed grains approximately equal. Hens fed wheat or oats rations produced chicks with more vigor than those from hens fed corn.

Chicks hatched from eggs of the various pens showed some variation in weight at four weeks of age, but not at hatching time or at ten weeks. It seems questionable if grains in the diet of the parental stock have much effect upon the subsequent growth of chicks.

Triple XXX Alfalfa Meal

Use more of it—it's healthful



THE DENVER ALFALFA MILLING & PRODUCTS CO.

Merchants Exchange
ST. LOUIS

LAMAR, COLO.

Poultry Production

by Lippincott and Card

(6th Edition—Thoroughly Revised)

Every elevator that grinds and mixes poultry feeds needs this new, quick-reference volume, devoted to practical management of poultry enterprises. Prepared by noted authorities, it includes 215 illustrations and a colored plate.

Chapters treat of Breeds of Chickens; Structure of the Chicken and the Formation of the Egg; Principles of Poultry Breeding; Selection and Improvement; Principles of Incubation; Practice of Incubation; Brooding and Rearing; Houses and Equipment; Principles of Poultry Nutrition; Feeds; Nutrient Requirements of Poultry; Management Practices; Marketing Poultry Products; Business of Poultry Keeping.

Bound in cloth. 603 pages, fully cross indexed. Weight 4 lbs. Price, \$4.00, plus postage.

Grain & Feed Journals

Consolidated

332 S. La Salle St.

Chicago, Ill.

Feed Prices

The following table shows the closing bid price each week for September futures of standard bran and gray shorts, spot cottonseed meal and No. 1 fine ground alfalfa meal, in dollars per ton, and No. 2 yellow corn and No. 2 yellow soybeans in cents per bushel:

Minneapolis Spot				Kansas City			
	Bran	Midts		Bran	Shorts		
May 13.....	19.50	21.50		13.55	17.00		
May 20.....	18.00	20.00		14.45	18.20		
May 27.....	18.25	22.00		14.70	18.65		
June 3.....	16.50	20.50		14.00	17.60		
June 10.....	16.50	21.50		14.20	17.60		
June 17.....	16.50	22.00		14.55	17.75		
June 24.....	16.75	22.50		13.80	16.90		
July 1.....	16.00	20.00		13.30	16.50		
July 8.....	15.00	18.50		13.30	16.25		
July 15.....	15.00	18.00		12.90	16.10		
July 22.....	14.50	16.50		12.40	15.50		

St. Louis*				Chicago			
	Bran	Shorts	Soybeans		Meal		
May 13.....	16.85	19.25	98		26.20		
May 20.....	17.65	20.50	97		26.20		
May 27.....	17.75	20.75	92½		26.20		
June 3.....	17.00	19.75	92¾		25.20		
June 10.....	17.35	19.75	94		25.20		
June 17.....	17.50	20.00	92		25.70		
June 24.....	16.85	18.75	95		25.20		
July 1.....	16.40	18.70	91¼		24.70		
July 8.....	16.25	18.50	93¼		24.70		
July 15.....	16.10	18.50	88		24.20		
July 22.....	15.60	17.50	91¼		24.20		

Cottonseed Meal				Kansas			
	Ft. Worth	Memphis			City	Chicago	
May 13.....	30.00	24.00			Alfalfa	Corn	
May 20.....	30.00	23.50			18.50	52¼	
May 27.....	30.00	23.50			18.50	52¼	
June 3.....	30.00	23.50			19.50	51½	
June 10.....	30.00	23.25			18.75	52	
June 17.....	31.00	23.25			19.00	51½	
June 24.....	31.00	23.00			19.00	50	
July 1.....	31.00	22.50			19.00	49¼	
July 8.....	31.00	22.50			18.50	48¾	
July 15.....	31.00	21.50			18.50	46½	
July 22.....	31.00	21.25			18.50	41½	

*St. Louis bran, basis Chicago delivery; shorts St. Louis delivery.

WOOSTER BRAND

41% Protein

SOYBEAN OIL MEAL

Expeller Processed—Improved Quality

Try It—You Will Like It

SOYA PROCESSING CO.

505 Palmer St.

WOOSTER, OHIO

Tel. 59

Heated Molasses Sprayed Into Feed for Thoro Mix

Arthur Aggen, owner-manager of Aggen & Son, operator of a feed grinding and mixing plant and rye flour mill on the C&NWRR at Port Washington, Wis., now supplies molasses feeds, mixed according to the desires of the dairy men of his community.

His Vapo Las System, manufactured and installed by the Card Manufacturing Co., a newcomer in the field of custom molasses mixers, handles two tons of feed per hour, mixing in any percentage of molasses the feed will carry, as high as 40% to 50% if the customer so wishes, tho Mr. Aggen has never had call for a mix of more than 34%.

The advantage claimed for this hot molasses system is that it does a very thoro job of whipping the molasses into the feed, so that it is completely absorbed by the feed.

Ben H. Card, who invented the machine, has a little more detailed explanation of what happens in the mixing process involved. He says: "Molasses is rapidly heated by an electrical immersion type heater through a secondary heater that exposes a very large area of radiation to the molasses. With this method of heating, we can quickly heat and maintain a 200 degree temperature of the molasses with safety. Then with a combination of heat and balanced pressure we pass the molasses through a specially designed atomizer that breaks it up into millions of tiny particles, so fine that it is practically invisible. This finely atomized fog is transferred to a falling movement of feed in such a manner that the feed is in suspension when these particles contact it. The result is that the sudden drop in temperature due to atomization seems to separate the moisture or water content from the solid material and both are taken into the feed as separate and distinct particles. Particles of feed surround the particles of molasses solids, completely insulating them from one another and the moisture in free suspension is absorbed by the feed as free water particles. The result is a very complete mixture. The nature of the treated feed is such that a hand full of freshly treated feed can be squeezed as firmly as possible and upon opening the hand the feed will fall apart like dry sand. This test can be made with as high as 25% molasses by weight added to such feed as wheat bran, standard middlings, oat flour and even wheat flour.

"Feeding tests have shown that as high as 30% molasses by weight can be fed without affecting the digestive action of the animals or causing excessive laxative action. No lumps or balls of free molasses are found in the feed.

"To test what takes place we held a sheet of glass in the path of the atomized spray. In a comparatively short time we could run a razor blade along the surface of the glass, and these fine specks of molasses solids would jump off like dried varnish. Immediately after spraying the specks or particles of free moisture could be seen on the surface of the glass. These specks of water were quickly taken into the atmosphere and left the solid particles that hardened on the glass."

The system consists essentially of an oblong finned tank that holds 700 pounds of molasses. This tank is inclosed in a second tank holding 8 gallons of a mixture of water and anti-freeze (the latter just in case the electricity should be turned off on a cold night). Into this mixture of water and anti-freeze protrudes six 3,000 watt electric heating units, controlled by a thermostat. The electric heating units heat the water and anti-freeze mixture, which in turn heats the tank holding the molasses, and the thermostat maintains the temperature of the latter at 130 to 140 degrees F. Molasses at this temperature flows readily ("like water," says Mr. Aggen). So it is an easy job for a ¾ h.p.

GE motor, a pump, and a gauge on top of the unit to send it spraying in a fine mist under 80 pounds pressure thru a jet that opens into the top of a horizontal, nine-foot-long, 8 inch combination of spiral conveyor and paddle pushers turned at 600 r.p.m. by a 2 h.p. motor. Revolving at this speed, the paddles on the conveyor kick the ground feed well into the air, where it is kept under control by steeply hopped wood sides over the open-top channel of the conveyor. The mist of molasses meets in the air the ground feed, and they drop together back into the conveyor box to be whipped into a thoro mix. At the end of this nine foot mixing chamber the molasses feed drops into a bifurcated sacking spout.

The percentage of molasses fed into the feed can be controlled with valves on the heating and pressure unit, but Mr. Aggen has another means for control. His one-ton vertical feed mixer hangs from the ceiling nearby and can be emptied thru a spout he has made, into the boot of a leg that feeds the mixing chamber of the molasses mixer. After a batch of feed is thoroly mixed, Mr. Aggen leaves the mixer running but pulls the emptying slide out a predetermined distance (marked with notches) and lets its contents run into the leg for elevation to the molasses mixer. Thus by controlling the flow of feed into the molasses mixer he gets 5% to 20% molasses mix without bothering with the molasses control valves.

The heating and spraying unit holds only 700 pounds of molasses. On a busy day it has to be kept filled. Mr. Aggen's 12,000 gallon molasses storage tank is buried under the floor of the basement, so deep in the ground that its temperature never falls below 50 degrees F. The tank is of concrete with walls 12 inches thick. Its floor slopes to a corner where it drains into a pump set into a pit one foot lower. Thus the supply pump always draws molasses from the bottom of the tank and prevents the occurrence of settlements that might have to be cleaned out occasionally. The supply pump is run by a small motor to force the molasses from the tank up an inclined pipe to the work floor of the grinding and mixing plant.

Electrical consumption of this mixing system, says Mr. Aggen, is about the same as that of a cold molasses system. The power required is very low, but the difference is made up in the electric current consumed by the heating units. The real advantage of the system is the thoro mix made possible by

using molasses at temperatures of 130 to 140 degrees.

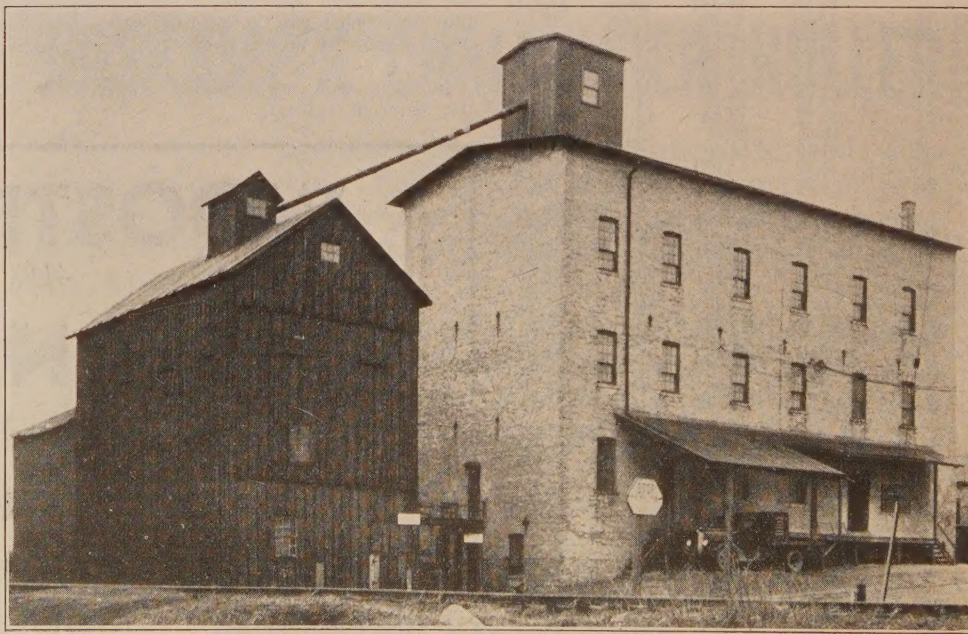
Making of molasses mixtures is an expansion of the Aggen business. Mr. Aggen uses a 22 inch double runner attrition mill, and his feed mixer to turn out laying, starting, and chick mash under his "Aggen Sunshine Brand," makes cracked corn with a corn cutter, grinds as high as 50 barrels of rye flour a day in season, and handles barley and other grains thru his 10,000 bushel grain elevator.

Efficiency of Carotene from Alfalfa Meal

This work at the University of Idaho showed rather conclusively that alfalfa leaf meal, when fed in sufficient amounts to furnish 0.2 mgs. of carotene per bird daily, kept the birds in good weight, maintained fair egg production, prevented the occurrence of deficiency lesions in the throat, and was sufficient to secure good hatchability. By increasing the alfalfa to 0.5 mg. of carotene per bird daily slightly higher egg production was secured but hatchability, body weight, and the apparent health of the birds were not benefited. However, other workers have shown and work at this station has indicated that when the carotene content of the ration was increased the vitamin A content of the eggs was increased.

It cannot be said for certain that 0.2 mg. of carotene is definitely the lowest level on which laying hens can live and do well, but it is doubtlessly very close to the minimum; it has been shown that 0.1 mg. of carotene per bird daily is definitely insufficient to prevent the presence of deficiency lesions; whereas 0.2 mg. of carotene per bird daily was sufficient to meet the individual requirement of the laying hen, it was not enough to allow her to store a very great amount in the eggs and neither did it endow her chicks with a sufficient amount to assure good livability.

Interpreting this work in terms of vitamin A units it is found that 0.2 mg. of carotene is equivalent to 333 U.S.P. units or 238 Sherman-Munsell units of vitamin A. This is in close agreement with the work by Sherwood and Fraps, who estimate that laying hens may be kept in good health and produce eggs in good quantities on approximately 240 Sherman-Munsell units of vitamin A per day if the vitamin A content of the eggs is disregarded.—J. K. Williams and others in Poultry Science.



Elevator and Mill of Aggen & Son, Port Washington, Wis.

THE LIGHTNING SEASON IS HERE

IT IS NOT YET TOO LATE TO
PROTECT YOUR PROPERTY WITH
LIGHTNING PROTECTION.

SAVINGS IN COST OF INSURANCE
WILL USUALLY PAY FOR
AN INSTALLATION IN
A SHORT TIME.

ASK YOUR "MILL MUTUAL" INSURANCE
OFFICE FOR FULL PARTICULARS

MUTUAL FIRE PREVENTION BUREAU

Department of
ASSOCIATION OF MILL AND ELEVATOR
MUTUAL INSURANCE COMPANIES

400 West Madison Street
Chicago, Illinois

Grain Shipping Books

Record of Cars Shipped facilitates keeping a complete record of each car of grain shipped from any station, or to any firm. It has the following column headings: Date Sold, Date Shipped, Car Number, Initials, To Whom Sold, Destination, Grain, Grade Sold, Their Inspection, Discount, Amount Freight, Our Weight Bushels, Destination Bushels, Over, Short, Price, Amount Freight, Other Charges, Remarks. Book contains 80 double pages of ledger paper, size $9\frac{1}{2} \times 12$ inches, with spaces for recording 2,320 carloads. Well bound in heavy black pebble cloth with red keratol back and corners. Shipping weight, $2\frac{1}{2}$ lbs. Order Form 385. Price \$2.50, plus postage.

Sales, Shipments and Returns. Is designed to save time and prevent errors. The pages are used double; left hand pages are ruled for information regarding "Sales" and "Shipments"; right hand page for "Returns". Column headings provide spaces for complete records of each transaction, one line. Book contains 80 double pages of ledger paper, size $10\frac{1}{2} \times 16$ inches, with 8-page index. Spaces for recording 2,200 cars. Bound in heavy canvas with keratol corners. Weight, $3\frac{1}{4}$ lbs. Order Form 14AA. Price \$3.35, plus postage.

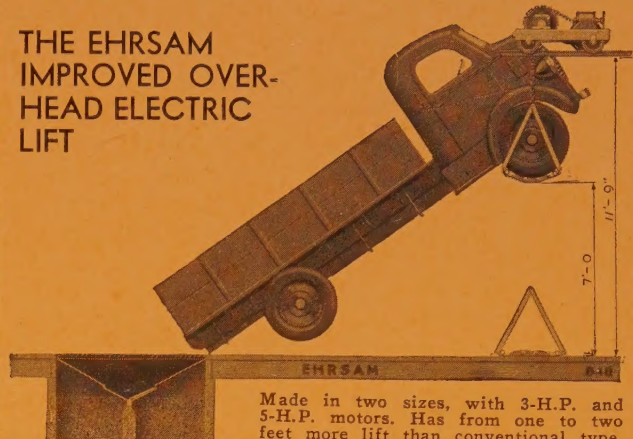
Grain Shipping Ledger for keeping a complete record of 4,000 carloads. Facing pages are given to each firm to whom you ship and account is indexed. Book contains 80 double pages of ledger paper with 16-page index, size $10\frac{1}{2} \times 16\frac{1}{2}$ inches, well bound with black cloth covers and keratol back and corners. Weight, 4 lbs. Order Form 24. Price, \$3.50, plus postage.

Shippers Record Book is designed to save labor in handling grain shipping accounts and gives a complete record of each car shipped. Its 80 double pages of ledger paper, size $9\frac{1}{2} \times 12$ inches, provide spaces for 2,320 carloads. Wide columns provide for the complete record of all important facts of each shipment. Bound in heavy black cloth with keratol back and corners. Shipping weight, $2\frac{1}{2}$ lbs. Order Form 20. Price \$2.50, plus postage.

Grain & Feed Journals
CONSOLIDATED
332 South La Salle St., Chicago, Ill.

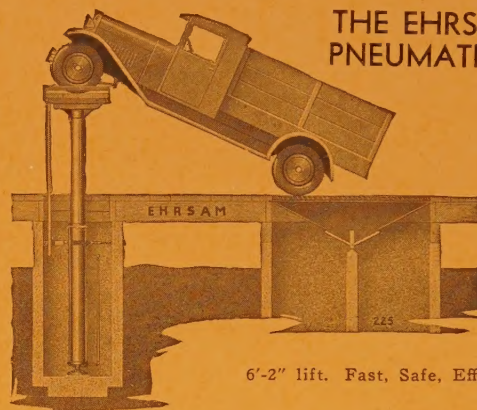
EHR SAM TRUCK LIFTS

THE EHR SAM
IMPROVED OVER-
HEAD ELECTRIC
LIFT



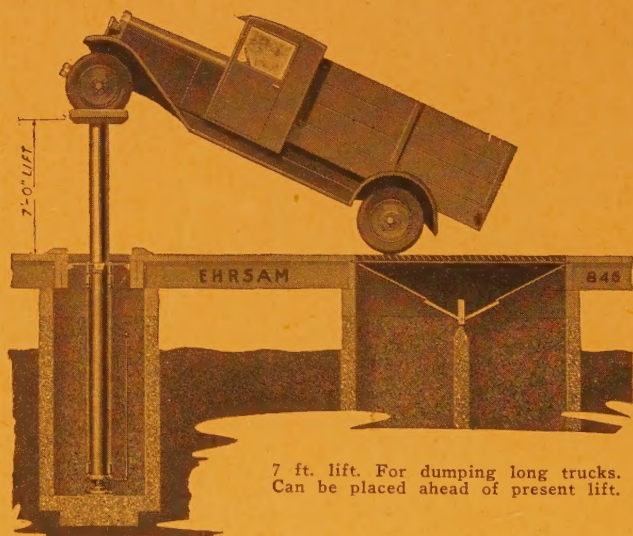
Made in two sizes, with 3-H.P. and 5-H.P. motors. Has from one to two feet more lift than conventional type.

THE EHR SAM STD.
PNEUMATIC LIFT



6'-2" lift. Fast, Safe, Efficient.

THE EHR SAM STYLE B PNEUMATIC LIFT



7 ft. lift. For dumping long trucks.
Can be placed ahead of present lift.

Write for new catalogue No. 439

THE J.B. EHR SAM & SONS MFG. CO.
ENTERPRISE, KANSAS

W. H. Kent, 549 W. Washington Blvd., Chicago
Allied Equipment & Supply Co., 1639 W. Main St., Okla. City
Ralph K. Albert, 902 Southland Life Bldg., Dallas

YOUR DUST PROBLEMS

Can Be Solved

AND

Our experience in DUST CONTROL methods is as valuable to you as *your* experience in handling and processing grain is to the success of your business.

When You BUY

dust control without the experience, you buy only materials and labor. Our experience of more than 58 years costs you nothing extra.

In grain elevators Day Systems Set the Standard in Dust Control

Your inquiries do not obligate you in any way.

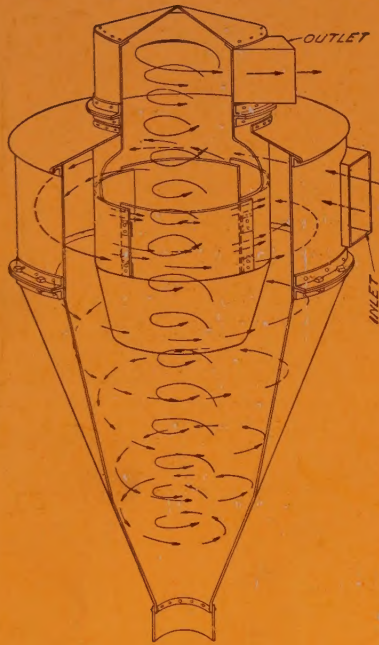
Dual-Clone Dust Collectors are replacing old type collectors. Ask for booklet explaining results.

THE DAY COMPANY

2938 Pillsbury Ave.

Minneapolis, Minn.

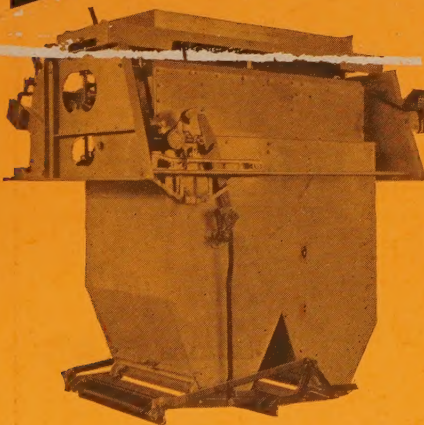
In Canada: The Day Company of Canada, Ltd.



The Dual-Clone
Dust Collector

A real advancement in efficient
Dust Control.

DOUBLE YOUR PROFITS



Load your cars in half
the time — double the
number of cars you load
—and more than double
your profits.

The new Richardson 25-Bushel All Automatic Grain Shipping Scale loads at the rate of 4,000 bushels per hour. You know exactly how many bushels you load into each car for it accurately weighs and accurately records in printed form every pound.

Install the new Richardson All Automatic Grain Shipping Scale and bring your handling and shipping facilities up-to-date

... make more money the Richardson way. Sizes to suit any capacity. Write for your copy of descriptive bulletin 11034 covering this newest Grain Shipping Scale.

RICHARDSON

Chicago

Omaha

Wichita

Columbus

Minneapolis

San Francisco

RICHARDSON SCALE COMPANY, Clifton, New Jersey



SIDNEY TRAVELING TRUCK DUMP

designed for your driveway
with

special geared motor unit and push button
control.

STURDY SILENT FAST

Send for descriptive literature.

THE SIDNEY GRAY MACHINERY COMPANY
SIDNEY, OHIO